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AN ANALYSIS OF THE
SOURCE SELECTION PROCESS
AT
AERONAUTICAL SYSTEMS DIVISION

THESIS

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AERONAUTICAL SYSTEMS DIVISION

THESIS

Presented to the Faculty of the School of Systems and Logistics
of the Air Force Institute of Technology

Air University

In Partial Fulfillment of the
Requirements for the Degree of
Master of Science in Contracting Management

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September 1989

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Acknowledgements

I would like to take this opportunity to express my appreciation to my thesis advisor, Maj Carl R. Templin, for his encouragement, assistance, and support in the completion of this project.

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Abstract

This pilot research study was intended to identify factors which affect the length of the source selection process and to suggest changes to make the process more efficient. To accomplish this objective, interviews were conducted with Aeronautical Systems Division (ASD) contracting personnel who had recently participated in source selections.

The study identified several factors which appear to be significant contributors to the length of the source selection process. These factors are:

- 1) lack of understanding, experience, and training;
- 2) lack of teamwork;
- 3) lack of quality control;
- 4) lack of written guidance;
- 5) effects of ASD streamlining initiatives;
- 6) excessive oversight;
- 7) unnecessary or excessive requirements;
- 8) manpower constraints; and,
- 9) politics.

The recommendations of this study are intended to limit source selection activities to those essential to the integrity of the process, remove extraneous participants from the process, and ensure that actions are completed correctly the first time. The most

significant recommendations related to specific activities include:

- 1) changing public law/FAR requirements to allow screening of CICA synopsis respondents and to charge consultants and marketers for RFPs as a cost of doing business;
- 2) establishing the Acquisition Review Team (ART) as the sole RFP review at ASD;
- 3) completing the initial technical evaluation before determining whether to award without discussions;
- 4) severely limiting cost analysis; and,
- 5) deleting the requirement for Most Probable Cost (MPC) estimates.

The general recommendations include:

- 1) development of an extensive training program to develop a thorough understanding of the source selection process, provide practical experience with skills required in source selection, and build teamwork;
- 2) application of Total Quality Management (TQM) to the source selection process to ensure that all decisions and activities provide a benefit to the process; and,
- 3) investigate establishing a centralized source selection office to provide core teams of experienced personnel to conduct all major source selections in order to maintain expertise and apply it to every source selection.

AN ANALYSIS OF THE SOURCE SELECTION PROCESS
AT AERONAUTICAL SYSTEMS DIVISION

I. Introduction

When the Air Force identifies a requirement for the development of a new weapons system, the contractor to perform the development is determined through the source selection process, a disciplined procedure for the solicitation and evaluation of offerors' proposals designed to ensure selection of 'the source whose proposal has the highest degree of credibility and whose performance can be expected to best meet the government's requirements at an affordable cost' (2:3). In fiscal years 1986 and 1987, the Aeronautical Systems Division (ASD, of Air Force Systems Command (AFSC) conducted 17 formal source selections for new systems ranging from Aircraft Ground Decoys, canvas or wood mock-ups of fighter aircraft, to the President's new aircraft, Air Force One, and the next generation fighter, Advanced Tactical Fighter. The average length of time required to complete these source selections, from release of the solicitation to source selection decision, was 222 days, almost eight months (11).

General Issue

Based on eleven years of experience in acquisition, the perception of the researcher is that as weapons systems and the rules which govern their acquisition have grown the time required to complete the source selection process has lengthened significantly. This delay in the source selection process delays the acquisition of needed contracts, resulting in increased administrative and contract costs to the Air Force. Perhaps more important, this also delays acquisition of the needed operational capabilities represented by the new weapons systems.

In recognition of our responsibility to provide the taxpayer with the maximum value for each tax dollar spent, AFSC has established a command goal of 120 days from RFP release to source selection decision. The Air Force has issued a new regulation, Air Force Regulation 70-30, Streamlined Source Selection Procedures, which suggests using limitations to proposal length, number of evaluation factors, and number of evaluators to shorten the source selection cycle.

During the first quarter of fiscal year 1988, fifteen source selections were completed by AFSC product divisions (10:2). The Medium Launch Vehicle II, a program managed by AFSC's Space Division, has

been cited as an example of the successes which have been achieved with the new streamlining initiatives; the source selection decision was rendered only 114 days after RFP release (10:2). Other programs did not fare as well. For example, the Mark XV source selection required 221 days from RFP release to source selection decision (1).

Specific Issue

In order to consistently complete the source selection in a reasonable amount of time, changes are required in source selection policies or in the source selection process itself.

Investigative Questions

The following questions were addressed to determine how the source selection process or policies should be modified:

1. What are the major factors contributing to the length of the process? Can these factors be controlled?

2. What local initiatives have been implemented to expedite source selections? How effective have these initiatives been?

Scope of the Research

This research project addresses source selection procedures required by Air Force Regulations 70-15 and 70-30 for full-scale engineering development and production of weapons systems over \$5 million in estimated cost. Source selection procedures for science and technology (S&T) programs (basic research, exploratory development, and advanced technology development) were excluded from consideration; due to the nature of S&T efforts, these acquisitions are generally much less complex than weapons system acquisitions and, therefore, employ simplified source selection procedures. However, recommended changes resulting from the research may in some cases be applicable to S&T procedures, which are derived from the procedures under investigation.

Only those situations involving technical competition were considered; acquisitions based on price competition were excluded because different procedures are utilized when low price is the sole criterion for selecting the successful contractor.

II. Literature Review

Introduction

Source selection requirements and policies are set forth in Subpart 15.6 of the Federal Acquisition Regulation (FAR); Air Force Regulation (AFR) 70-15, Formal Source Selections for Major Acquisitions; AFR 70-30, Streamlined Source Selection Procedures; and AFSC and product division supplements to these regulations. These regulations are discussed below to provide the reader with an understanding of the process under investigation. This discussion is not intended to address every requirement of the acquisition process, but will provide a comprehensive delineation of source selection requirements. The discussion will be limited to these regulations because no previous research on the source selection process was identified.

Discussion

For ease of presentation, the discussion will be divided into four sections: policy, organization, pre-evaluation activities, and proposal evaluation.

Policy. The source selection procedures described in AFR 70-15 are mandatory for Major Defense Acquisition Programs and Executive Programs. Major

Defense Acquisition Programs are those programs estimated to exceed \$200 million in Research, Development, Test, and Evaluation (RDT&E) and \$1 billion in production in fiscal year (FY) 1980 dollars. In FY88 dollars, this is approximately \$300 million in RDT&E and \$1.6 billion in production (2:3). Other programs which do not meet these dollar levels may be designated as Major Defense Acquisition Programs by the Secretary of Defense, Secretary of the Air Force, or Assistant Secretary of the Air Force for Acquisition. Executive Programs are those programs selected based on 'national significance, large resource commitment, or management complexity' (2:3) to receive direct oversight by the Assistant Secretary of the Air Force for Acquisition. These programs will be referred to hereafter as 'major programs.'

AFR 70-30 source selection procedures are applicable to non-major programs, full-scale engineering development or production efforts estimated to cost over \$5 million, but less than major program levels.

The source selection process is intended to promote competition; minimize the complexity of the solicitation, evaluation, and decision process; ensure an impartial, comprehensive evaluation of proposals; and ensure selection of the source whose proposal is best expected to fulfill the government's requirements (2:3; 5:3; 7:15-20). Consideration must be given to technical, cost, and business factors (2:3; 5:3) in determining which proposal is most advantageous to the government.

Organization. Both AFR 70-15 and AFR 70-30 provide primary and alternate organizations. Example diagrams of the two organizations are presented below.

Every source selection is directed by a Source Selection Authority (SSA), a government official designated to ensure 'proper and efficient conduct of the entire source selection process' (5:4). The SSA has sole responsibility for making the source selection decision. Based on the estimated dollar value of the acquisition, importance of the goods or services involved, and product division policies, the SSA will be designated at various levels ranging from the contracting officer to the Secretary of the Air Force.

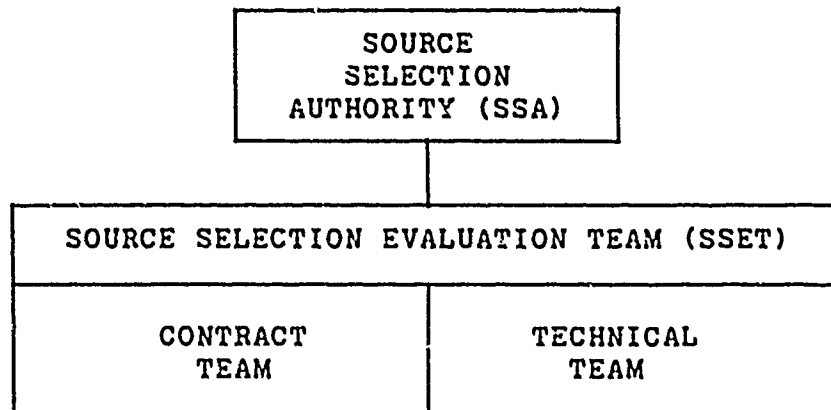


Figure 1. Alternate Organization for AFR 70-15 Source Selection (2:27)
Primary Organization for AFR 70-30 Source Selection (5:19)

The Source Selection Evaluation Board (SSEB), shown in Figure 2, is an ad hoc team of government specialists responsible for evaluating the proposals against the minimum requirements of the solicitation. The SSEB is divided into teams which perform different functions. The cost team is responsible for performing cost and price analyses and developing Most Probable Cost estimates for all proposals. The contract definitization team serves as the interface between the government and the offerors, and is responsible for negotiating contracts with all acceptable offerors. Each technical team evaluates a different aspect of the proposals, (e.g. engineering, test, logistics,

management) excluding contract and cost matters. These team responsibilities are addressed in greater detail in the sections of the discussion dealing with the source selection activities.

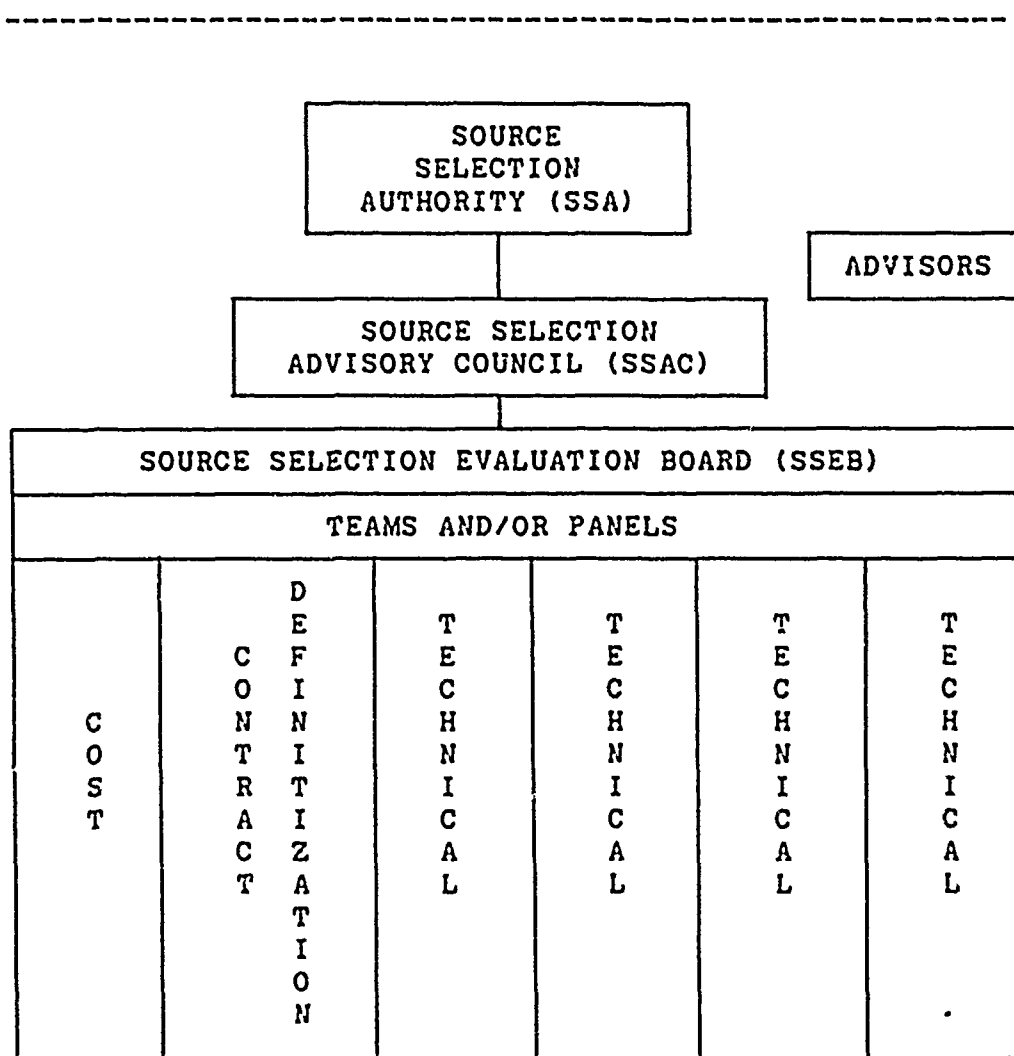


Figure 2. Primary Organization for AFR 70-15 Source Selection (2:27)
 Alternate Organization for AFR 70-30 Source Selection (5:19)

The Source Selection Advisory Council (SSAC), Figure 2, is a panel of senior government personnel appointed by the SSA to provide advice on conduct of the source selection and to prepare a comparative analysis of the proposals based on the evaluation by the SSEB.

In the organization shown in Figure 1, the SSEB and SSAC are combined into the Source Selection Evaluation Team (SSET). The SSET is composed of a contract team, which performs the functions of the cost and contract definitization teams of the SSEB, and a single technical team which evaluates all other aspects of the proposals.

AFR 70-15 prohibits use of its alternate organization (Figure 1) when the Secretary of the Air Force acts as the SSA or when representatives of the Secretariat participate in the source selection. This prohibition is the only criterion in either regulation concerning selection of an organization structure; neither regulation states a preference for either organization.

AFSC supplements to AFR 70-15 and AFR 70-30 require a Performance Risk Analysis Group (PRAG) as an independent evaluation group, separate from the SSEB, which reports directly to the SSAC (3:2) or as a separate evaluation team within the SSET (6:). The PRAG is composed of senior government personnel with extensive acquisition experience. The PRAG group is responsible for evaluating the past performance of each offeror and determining the performance risk associated with each proposal (3:1; 6:4).

Pre-evaluation activities. This phase of the source selection includes all activities from identification of the requirement through receipt of proposals.

The first significant activity of the pre-evaluation phase is the Business Strategy Panel (2:11; 4:5) or Acquisition Strategy Panel (3:1; 6:4). These panels are intended to review and approve the proposed acquisition strategy, including such issues as designation of the SSA, adequacy of the technical requirements documents, source selection evaluation criteria, quality assurance requirements, business strategy, logistics, and any unusual aspects of the acquisition (5:5).

Prospective sources for the acquisition must be identified through market surveys which may range from 'contacts with knowledgeable federal and nonfederal experts and results of recent market tests to more formal sources such as ...announcements ...in the Commerce Business Daily' (2:12).

A Source Selection Plan (SSP) describing the program, source selection organization, pre-evaluation activities, evaluation procedures and criteria, acquisition strategy, and schedule for completing the source selection events must be prepared by the program office, reviewed by organizations determined by local policy, and approved by the SSA.

The SSEB or SSET must develop the criteria by which proposals will be evaluated. Three types of evaluation criteria are required: cost criterion, specific criteria, and assessment criteria.

Cost is a mandatory criterion to be evaluated as an area for every source selection. Cost and/or price analysis is used to determine the reasonableness, realism, and completeness of the proposed price. Cost is not rated; results of the cost/price analysis are presented in narrative form (2:14; 5:7).

Specific criteria are derived from characteristics of the program. Specific criteria deal with areas (e.g. technical, logistics, management, operational utility) which are divided into items representing a greater level of detail. Items may be further broken into factors and subfactors if the evaluation area is complex. Only characteristics of the program which are significant to program success should be included in the specific criteria (2:14; 5:7).

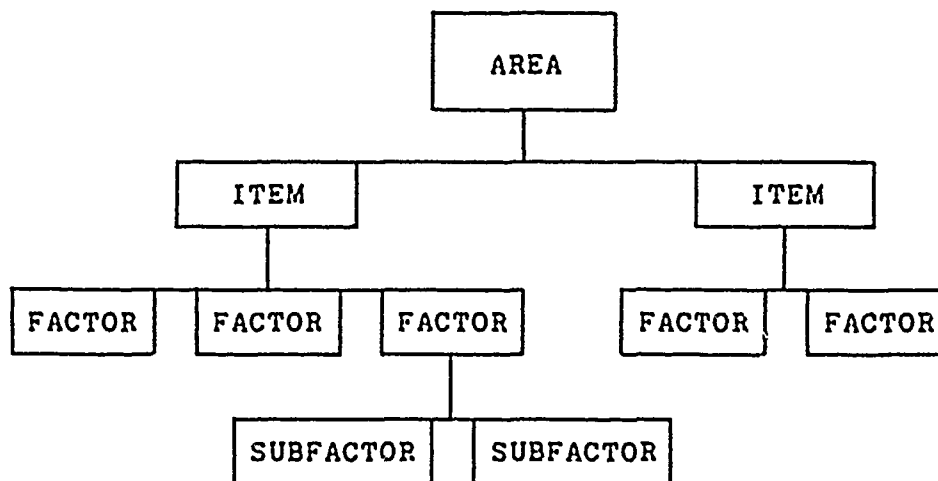


Figure 3. Graphic depiction of structure of specific criteria.

Assessment criteria are related to the offeror's abilities as demonstrated in the proposal (2:14; 5:7). Assessment criteria typically include soundness of approach, understanding the problem, compliance with requirements, and special technical factors. Assessment criteria are applied against the specific criteria in an evaluation matrix which must be developed during the planning phases of the acquisition.

AREA: TECHNICAL DESIGN AND INTEGRATION

		SPECIFIC CRITERIA		
		Airframe Design	R&M	Avionics Design
A S S E S S M E N T	C R I T E R I A	Soundness of Approach		
		Understanding the Problem		
		Compliance with Reqmts		

Figure 4. Evaluation Matrix (2:32; 5:21).

The relative importance of the evaluation areas, specific criteria, and assessment criteria must be determined, because this information must be provided to the offerors in the solicitation.

In addition to the aspects covered by the criteria, general considerations such as past performance, proposed contractual terms and conditions, and preaward survey results are also evaluated. The SSEB or SSET must determine what general considerations will apply, because these considerations must be provided to the offerors in the solicitation.

The SSEB or SSET must develop evaluation standards which correspond to the evaluation criteria. The standards set forth the minimum acceptable response to a requirement; they are used to measure whether a proposal meets, exceeds, or fails to meet the requirements (2:15; 5:8). The evaluation standards are not included in the solicitation document.

The SSEB or SSET must prepare, for inclusion in the solicitation, a comprehensive set of instructions for proposal preparation. These instructions address content and format of the information to be provided to the government for evaluation.

The final pre-evaluation activity is the preparation and issuance of the solicitation document, the Request for Proposal (RFP). The contracting officer is responsible for preparing the RFP, using information and documents provided by the program manager and other team members, and obtaining the reviews and approvals required before its release.

Proposal evaluation and contract award. This phase of the source selection process begins with the receipt of proposals from the offerors.

If desired, the SSEB or SSET may require the offerors to conduct oral briefings to provide the overviews of their proposals. Oral presentations must occur before the evaluation process begins. If oral presentations are required, evaluators must attend all or none of the presentations "to eliminate bias and to ensure objectivity during the evaluation process" (2:15).

The technical evaluators compare each proposal to the evaluation standards to determine the adequacy of each proposal and assign ratings to each. The team must document every instance in which a proposal fails to meet the minimum requirements of the solicitation; these documents are called deficiency reports. The evaluators must also document any aspects of the

proposal which require clarification because the data provided is contradictory or inadequate to evaluate; these documents are called clarification requests. The clarification requests are immediately sent by the contract team to the offeror to request the needed clarification. The deficiency reports are held by the contract team until the initial technical evaluation is completed. Disposition of these reports will be addressed below.

The products of this evaluation are the deficiency reports, clarification requests, and a written report which must address, at a minimum:

what is offered; whether it meets or fails to meet the standard; any strengths or weaknesses; what, in the evaluator's opinion, may be done to remedy a deficiency; the impact of any deficiency; and a risk assessment of the offeror's ability to perform. (2:15)

The evaluator must also convert the assigned ratings to color ratings as shown in Figure 5.

The cost and/or price analysis is performed by the cost team, if one exists in the organization, or the contract team. The evaluation typically includes both cost and price analysis. Cost analysis is a detailed examination of all elements of cost proposed and requires the performance of an audit of the proposal by the Defense Contract Audit Agency and field pricing

report by the contract administration office. The findings of the audit, field pricing report, and technical evaluation are applied to the cost proposal to determine a fair and reasonable price for the proposed effort. Price analysis generally compares the proposed price of the system to prices of similar systems to determine its reasonableness. On major programs, 'an additional measurement of cost or price reasonableness and realism' (2:17) is required. This additional check requires that the government develop a Most Probable Cost estimate which is based on the results of the cost analysis of the proposed costs and represents the estimated cost of ownership of the system throughout its lifetime. This Most Probable Cost is then compared to the proposed cost and the previously prepared program office estimate.

After completion of the initial evaluation, the contracting officer makes a competitive range determination for approval by the SSA to determine which offerors will be included in the discussion phase of the source selection process. If a proposal does not have a reasonable chance of being selected for award, the proposal may be declared to be outside of the competitive range and excluded from further consideration in the source selection. A proposal is

considered to be outside the competitive range if it does not address essential requirements of the solicitation, is so deficient that further consideration would require a complete revision of the proposal, or contains major deficiencies which discussions could not be expected to cure (2:19; 5:10-11). Affected offerors must be notified immediately of their exclusion from the competitive range. Following the competitive range determination, the contract team issues the deficiency reports to the appropriate offerors, providing an opportunity for the offerors to revise their proposals to remedy the deficiencies.

Discussions are conducted by the contract definitization team of the SSEB or contract team of the SSET. Discussions must be held with all offerors determined to be in the competitive range. During discussions, offerors must be given an opportunity to correct any remaining deficiencies in the proposals and to resolve any uncertainties and suspected mistakes. The discussions may not reveal any aspects of proposals submitted by other offerors, provide notice of proposal weaknesses caused by the offeror's lack of diligence in preparing the proposal, or use auction techniques to reach an expected price (7:15-21).

COLOR	RATING	DEFINITION
Blue	Exceptional	Exceeds specified performance or capability in a beneficial way to the Air Force; and has high probability of satisfying the requirement; and has no significant weakness.
Green	Acceptable	Meets evaluation standards; and has good probability of satisfying the requirement; and any weaknesses can be readily corrected.
Yellow	Marginal	Fails to meet evaluation standards; and has low probability of satisfying the requirement; and has significant deficiencies but correctable.
Red	Unacceptable	Fails to meet a minimum requirement; and deficiency requires a major revision to the proposal to make it correct.

Figure 5. Color Codes for Proposal Ratings (2:16).

When discussions with all offerors are complete, the contracting officer affords all offerors a final opportunity to revise the proposals through the issuance of a request for Best and Final Offers (BAFOs). The request for BAFO includes a complete contract which the offeror must sign and return with the BAFO.

In the BAFO, an offeror may modify any aspect of the proposal, provided that adequate rationale for any change is included. After receipt of the BAFOs, the evaluators must update the evaluations to reflect any changes made by the offerors.

For AFR 70-15 source selections, the SSEB must submit the results of the evaluations to the SSAC in an executive summary report and an oral briefing. Based on the executive summary report and briefing, the SSAC prepares an analysis report which compares the proposals and presents the results of the discussions and BAFOs. The SSAC is also responsible for preparing a source selection briefing based on the comparative report which presents to the SSA all the information required to make the source selection decision (2:20).

When the procedures of AFR 70-30 are used, the SSET prepares a Proposal Analysis Report based on the evaluation reports prepared by the evaluation teams. The SSET also presents a briefing of the evaluation results to the SSA for his decision (5:11).

The SSA decision is transmitted to the contracting officer in the source selection decision document signed by the SSA. The document sets forth the decision, rationale for the decision, and, if award is to be made to other than the low offeror, a determination that 'the technical superiority of the higher priced proposal warrants the additional cost involved' (2:21/22; 5:12; 6:10).

The contracting officer executes the signed contract submitted with the winning offeror's BAFO, completes any final contract reviews required, provides the congressional and other notifications required, notifies the unsuccessful offerors, and effects distribution of the fully executed contract. The source selection is complete.

Relationship to Research

The regulations which were reviewed in this chapter served as a basis for the list of activities and sub-activities which was developed for the interviews used in gathering the data for this study. These regulations also served as a basis for analyzing the source selection process as presented by the interview subjects and their suggested changes to the process.

The methodology used in developing the list and performing the analyses referred to above are addressed in the following chapter.

III. Methodology

Overview

This chapter describes the research methodology used to answer the research questions posed in this study:

1) What are the major factors contributing to the length of the process? Can these factors be controlled?

2) What local initiatives have been implemented to expedite source selections? How effective have these initiatives been?

The discussion includes the development of the interview instrument, subject selection, interview protocol, and data analysis. A brief summary concludes the chapter.

Interview Instrument Development

A semi-structured interview was determined to be the appropriate method for gathering data for this field experiment. A survey was inappropriate because the desired information was not quantitative in nature, and could only be obtained through verbal explanation and assessment of the participants' experiences. A structured interview was too inflexible for the

circumstances. The semi-structured interview was determined to be the most suitable instrument to gather qualitative information, and to allow follow-up questions determined by the responses given.

The interview, Appendix A, was based on a list of source selection activities which was derived from the regulations discussed in Chapter II and the researcher's experience with source selections at Aeronautical Systems Division (ASD). The activities on the list were:

PRE-EVALUATION ACTIVITIES

- Business Strategy Panel/Acquisition Strategy Panel
- Identification of sources
- Source Selection Plan
- Evaluation criteria development
- Evaluation standards
- Instructions to offerors
- Request for Proposal issuance

PROPOSAL EVALUATION AND CONTRACT AWARD

- Receipt of proposals
- Quick Look briefing or memo
- Oral briefings by offerors
- Technical evaluation
- Mid-Term briefing
- Cost/price analysis/Most Probable Cost estimate
- Competitive range determination
- Model contracts
- Discussions
- Best and Final Offers
- Technical evaluation update
- SSEB Executive Summary Report
- SSEB briefing to SSAC
- SSAC Analysis Report
- SSET Proposal Analysis Report
- Final SSA briefing
- SSA decision document
- Contract execution

Several of the activities were further divided into sub-activities. A complete list of all the activities and sub-activities can be found in Appendix A.

A list of basic questions was developed to elicit the information needed to answer the investigative questions. The interview questions were divided into four general areas:

- 1) The first section of the interview was designed to identify problem areas in the source selection process. The respondents were required to review every activity on the list, identify the activities with which they had no experience, rate all other activities as 'not a problem' or as 'minor', 'moderate', or 'major' problems. For each activity identified as a problem, a series of questions was asked concerning the nature of the problem experienced, the cause of the problem, what immediate actions were taken to deal with the problem, and suggestions for long-term solutions to prevent the problem in the future.

- 2) The second section of the interview was designed to look at the source selection activities from a cost/benefit point of view; that is, does the benefit derived from the activity justify the investment of time or resources needed to complete it?

3) The next portion of the interview addressed initiatives which had been implemented to avoid or solve recurring problems or to expedite source selection schedules.

4) The final portion of the interview offered the subjects the opportunity to make any other comments on the source selection process or the interview.

In addition to this information on the source selection process, limited work-related background information was gathered on the interview subjects.

The background information consisted of:

- 1) job title,
- 2) years of government contracting experience,
- 3) other non-buyer/PCO acquisition-related experience,
- 4) experience at other AFSC product divisions, and,
- 5) extent of source selection experience.

This data was collected to define the sample from which the information was drawn.

After the interview questions were drafted, three pretest interviews were conducted, using the same protocol as the actual interviews. The subjects for the pretest interviews were ASD contracting personnel who had a familiarity with source selection procedures, but who were not in the population being considered by this research; these subjects had conducted source

selections related to science and technology (S&T) efforts. The pretest interviews were conducted to ensure that the questions were easily understood and that they elicited the information desired. The interview protocol was used to allow the researcher to become more familiar with the intended protocol, in order to be more fluent and at ease during the actual interviews. No interview questions were revised as a result of the pretest interviews.

Subject Selection

Because this was a purposive, non-probability, judgmental sampling, subjects were chosen for their experience with the topic rather than by random sampling. Candidates for the interview were ASD contracting personnel who had recent experience with source selections for full-scale engineering development or production programs over \$5 million. The research was limited to ASD because of time and resource constraints. The experience requirement and selection of ASD as the research location determined the size of the population. A list of source selections which had been completed within the last 18 months was obtained from ASD/PMPS, the ASD source selection office. Seventeen source selections and 18 points of

contact were included. The individuals listed for each source selection were contacted to schedule interviews. In several cases, the original participants in the source selections had been re-assigned to different ASD organizations, and the listed individual had begun to work on the program after the source selection had been completed. The names of the original participants were obtained, and a total of 19 individuals were identified as the population. Of the 19 possible subjects, one individual was an Air Force officer who had been re-assigned from ASD, and was thus no longer available to be interviewed. One individual refused to participate. Two individuals agreed to be interviewed, but did not appear for the interviews. Three individuals were unavailable due to workload or temporary duty considerations. A total of 12 individuals participated in the interviews.

Protocol

At least one day before the interviews, the subjects were provided copies of the interview package which is included as Appendix A. It was requested that they complete the section on work experience before the interview started. The lists of source selection activities and questions were provided to allow the

subjects to become familiar with the areas to be addressed. The subjects were also asked to identify the activities with which they had no experience. These actions were intended to minimize the time required to conduct the interviews.

The interviews were conducted face to face at ASD. Responses were recorded in writing during the interviews; the instruments used by the researcher had been designed to facilitate note-taking, and the pace of the interviews was slow enough to allow adequate written documentation.

At the start of the interview, the participants were told that their names would be listed as interview subjects, but that their responses would be anonymous; no program specific information would be included in Chapter IV, and no responses would be tied to any names of the interview subjects. This guarantee of anonymity was believed by the researcher to be necessary to ensure that honest, open responses were provided.

The subjects were generally very cooperative and appeared to be interested in providing extensive and reliable information. It appeared to the researcher that the participants felt that they had valuable information to contribute, and that their participation could provide the basis for meaningful change in the source selection process.

During the interview, the researcher frequently used follow-up questions to elicit further information about problem areas. The individual follow-up questions were based on the responses given by the subjects and the types of information desired.

For ease of conducting the interview, the list of activities was divided into two sections: 1) pre-evaluation activities, and 2) proposal evaluation and contract award. Each section of the list was handled separately.

Analysis

Statistical analysis of the responses was limited to frequency distributions of the 'major, moderate, minor, not a problem, no experience' responses. Every source selection activity identified as a problem of any magnitude was addressed in narratives which

summarize and compare the interview responses. Any suggested long-term solutions to these problems were analyzed, both for compatibility with requirements of law and practicality of implementation.

The results of the analysis of the interview responses were used to compile a list of recommendations for changes in regulation, policy, or procedures and suggestions for further research.

Chapter Summary

This chapter described the methodology used in conduct of this research project from formulation of the interview questions through data analysis. The results of this methodology will be presented in Chapter IV.

IV. Findings and Analysis

Overview

This chapter presents the research findings resulting from the previously described methodology. Following a description of the sample from which the information was obtained, the results of the interviews will be presented and analyzed. The interview was divided into four areas:

- 1) source selection problem areas and suggested solutions;
- 2) cost/benefit of source selection activities;
- 3) initiatives to improve source selection; and,
- 4) general comments on the process.

The discussion of the interview findings will be divided in the same manner. A brief summary will complete the chapter.

Description of the Sample

The sample for this research project consisted of 12 individuals. While this is a small sample, the total population consisted of only 19 people. The individuals in the sample displayed considerable knowledge on the source selection process, were very forthcoming in their responses, and provided an adequate sample for a pilot research study such as this.

The interview subjects had worked as government contract negotiators and/or contracting officers for an average of over 12.5 years. The range of experience was from 3.5 to 27 years. The distribution of experience is shown in Table 1. One individual cited 1.5 years of contracting experience with Air Force Logistics Command; the other individuals had worked only at ASD. All the interview subjects were civilians; one Air Force officer was a member of the population but was no longer assigned at ASD. No members of the sample had non-buyer/PCO acquisition-related experience. More than half the sample had participated in only one major source selection; the average for the sample was 1.9, with a maximum of four. This information is shown in Table 2. Many individuals in the sample had also participated in source selections which are outside the scope of this study (under \$5 million or science and technology).

All individuals in the sample had an adequate amount of general contracting experience to be considered credible. While source selection experience was rather limited, this was to be expected; many contracting offices at ASD do very limited numbers of major source selections, if any. The greatest number of source selections are conducted in organizations

such as Aeronautical Equipment (ASD/AE) or Training Systems (ASD/YW), which manage a number of programs. Offices which manage a single large program, such as the F-15 (ASD/VF) or F-16 (ASD/YP), conduct most of their business through sole source contracts with the airframe manufacturers. Therefore, the possibility of obtaining experience in source selection is related to the organizations to which a contract negotiator is assigned and the frequency of job rotation. An additional factor in source selection experience is the limited number of major source selections conducted by the entire product division. Only seventeen major source selections were completed at ASD between February 1988 and June 1989.

Table 1. Contracting experience of sample members.

<u>Experience</u> (in years)	<u>No. of Respondents</u>
1 - 5	1
6 - 10	5
11 - 15	4
16 - 20	0
21 - 25	1
26 - 30	1

Table 2. Source selection experience of sample.

<u>No. of source selections</u>	<u>No. of respondents</u>
1	7
2	0
3	4
4	1

Problem Areas and Suggested Solutions

For this portion of the interview, subjects identified source selection activities with which they had no experience, and rated the other source selection activities as 'not a problem' or as 'minor', 'moderate', or 'major' problems. Two of the respondents also insisted on rating several items as 'moderate to major' and 'minor to moderate,' although these were not among the desired responses. The summary of the responses to this portion of the interview is detailed in Appendix B. For each activity rated as a problem, the problems experienced, causes of those problems, how the problems were addressed, and how they might be avoided in the future were discussed.

Only five individuals cited activities with which they had no experience. This information was requested because not all the activities listed are included in all source selections; the researcher did

not want to show an activity as 'not a problem' if the lack of problems could have been due to a lack of use of the activity. However, a total of only 16 activities were cited. The maximum number of 'no experience' responses for any activity was two. These responses are shown in Table 3.

Table 3. Activities receiving 'No Experience' Responses

<u>Activity</u>	<u>Number of Responses</u>
Business Strategy Panel/ Acquisition Strategy Panel	2
Source Selection Plan	
Preparation	1
Approval	1
Evaluation criteria development	1
Evaluation standards development	1
Oral briefings by offerors	2
Cost and price analysis/ Most Probable Cost estimate	1
Technical evaluation update	1
SSEB Executive Summary Report	2
SSEB briefing to SSAC	2
SSAC Analysis Report	2

Total	16

A total of 94 problems were identified by the respondents. The average number of problems per interview was 7.8, with a range from 1 to 16. The most frequently identified problem activity (including its sub-activities) was 'technical evaluation,' named 19 times. Only five activities were rated as 'not a problem' by all respondents having experience with these activities:

- 1) oral briefings by offerors,
- 2) competitive range determination,
- 3) SSEB Executive Summary Report,
- 4) SSEB briefing to SSAC, and,
- 5) SSET Proposal Analysis Report.

Each activity cited as a problem will be addressed separately. For the convenience of the reader, the number of problem responses is shown after each activity name. The discussion for each problem activity is divided into two sections. The first section provides the information derived from the interviews. The second section contains the researcher's analysis of that information.

Business Strategy Panel (BSP)/Acquisition Strategy Panel (ASP). (Moderate - 1; Minor - 3)

Responses. The moderate problem concerned guidance given by the ASP. The respondent felt that the guidance received is not always logical and may result in increased costs for the program. Examples of

such guidance included changing the contract type for a development effort to firm fixed price and, in another instance, changing the basis for award to place more emphasis on technical aspects when the acquisition team had judged cost/price to be the most important factor in selecting the successful offeror. The cause cited by the respondent was politics overcoming good business decisions. At the time, the participants attempted to influence the outcome of the ASP; after failing in that, the only means of dealing with ASP guidance which was opposed to the team's judgment was to accept and implement the guidance given. The respondent's proposed solution was to ensure that good business (as opposed to political) decisions are made up front. No specific means of implementing this solution was provided.

A minor problem cited for the BSP/ASP activity concerned the inability to obtain a waiver to the requirement to conduct a BSP for a program which was considered routine and had no unusual aspects. The cause of this failure was unknown to the respondent. A

BSP was conducted, which resulted in a schedule slip. The proposed long-term solution included a more liberal waiver policy for acquisitions which are routine in nature, and better planning by the acquisition team to accomodate unforeseen occurrences such as the inability to obtain waivers, so that schedule impacts could be mitigated.

Another minor problem involved conflicting interpretations of the recommendations made by the BSP. In this case, team members held a meeting during which a consensus was reached. This problem has since been solved by implementation of an administrative requirement which provides an uninvolved party to attend the panel and record the minutes.

The third minor problem concerned the lack of adequate planning by the acquisition team; the team did not begin preparation far enough in advance of the ASP. The cause of this problem involved workload considerations; team members had other workload for which they were responsible, and ASP preparation was not made a priority over other workload. The problem was solved by having the SPO director assign a priority

to ASP preparation. The respondent suggested earlier identification of the potential problem caused by delaying ASP preparation, and earlier assignment of a priority to this preparation activity to prevent this problem in the future.

Analysis. Two of the four problems related to the BSP/ASP involved the unwillingness of authorities outside of a program office to accept the judgment of those most knowledgeable about the acquisition. While oversight by uninvolved experts can provide a useful balance to the parochial views of the program team, these strategy reviews sometimes serve 'political' interests at the expense of good business judgment. This would appear to be an arena where the decentralization of decision-making could provide a benefit to the acquisition process. Because numerous management reviews are required for major source selections, it would appear that deletion of the BSP/ASP requirement for these acquisitions would not jeopardize management oversight responsibilities. Changes to AFR 70-15, AFR 70-30, and the AFSC regulation on Acquisition Strategy Panels would be needed to delete the BSP/ASP requirement for source selections.

Identification of Sources. (Moderate - 1;

Minor - 4)

Responses. All respondents cited the same issue related to identification of sources. The regulatory requirements for this activity include a market survey, which, because its formal definition is nebulous, is generally conducted through a formal advertisement in the Commerce Business Daily, and a synopsis required by the Competition in Contracting Act (CICA), which must be accomplished by advertising in the Commerce Business Daily. The market survey is meant to discover qualified sources for the acquisition; only those sources who appear to have the requisite capabilities are placed on the source list. The CICA synopsis requirements allow no screening of potential sources; all respondents are placed on the source list and receive copies of the solicitation documents. In effect, two virtually identical synopses are required, which result in numerous unqualified sources on the source list. This problem was caused by the unclear definition of a market survey and the lack of ability to screen respondents to the CICA synopsis. The usual method of dealing with this problem has been to publish two synopses and send RFPs to all

respondents. Suggestions for long-term solutions included:

- 1) combining the market survey and synopsis requirements to allow one announcement;
- 2) changing the FAR requirements for the CICA synopsis to allow screening of the capabilities of the respondents to limit the source list to qualified sources; and,
- 3) changing the FAR requirements for the CICA synopsis to require respondents to identify themselves as manufacturers or marketeers/consultants and to require non-manufacturing concerns to pay for solicitation documents as a cost of doing business.

Analysis. All three suggested solutions appear to be reasonable approaches to this problem. The most conservative suggestion, combining the announcements, would eliminate one step from the acquisition process and result in a minor reduction of the time involved. The ability to screen respondents and/or charge non-manufacturing concerns for RFPs would provide a greater benefit to the acquisition system; the administrative effort required for reproduction and mailing dozens of solicitation documents, when only two or three proposals are expected, is a burden on the acquisition system which involves no return on investment. It could be argued that allowing the elimination of prospective sources could unfairly restrict access to the contracting system; however, criteria for screening could be developed to minimize

the possibilities for abuse. Implementation of any of these suggestions would require a change to the FAR; changes to the CICA synopsis might require changes to public law, depending on the detail included in CICA addressing the synopsis requirements.

Source Selection Plan (SSP). (Major - 1;
Moderate - 1; Minor - 1)

Responses. The major problem related to the SSP concerned the time required for preparation of the plan due to the number of revisions required. This problem was caused by the lack of knowledge of the planning process and the required content and format of the SSP on the part of personnel charged with preparing the plan. The problem was corrected through meetings with the program office to work out the problems. The suggested long-term solution was education; the respondent suggested that a short course be developed, based on ASD source selection procedures, to familiarize participants with SSP requirements.

The moderate problem dealt with the inclusion of too many evaluation factors in the SSP. The evaluators responsible for these inputs to the plan wanted to evaluate too many aspects of the proposals; they had to be persuaded that the streamlining initiatives required a reduction in the scope of the technical evaluation.

A meeting between the appropriate directors was required to accomplish this end. The long-term solution for this problem involved enforcement of existing regulatory guidance that limits the number of evaluation factors.

The minor problem was very similar to the major problem discussed above. In addition to the previously cited cause, this respondent also cited lack of early involvement of contracting personnel as a cause of the problem. In addition to suggesting education of the plan preparers as to format and contents of the plan, this respondent suggested early involvement of contracting personnel in the planning process as a means of avoiding problems with SSP preparation.

Analysis. Earlier involvement of contracting personnel in the planning process for source selections is needed to ensure that all contracting issues are adequately considered. The failure of program management personnel to seek this involvement can be caused by conflict between the program management and contracting functions which results from the different roles which are served by the functions. This conflict must be overcome so that the teamwork which is necessary for efficient conduct of source selections can be achieved.

The lack of knowledge of the source selection process cited by these respondents reflects a common theme of the interviews. While the SSP in itself does not represent a significant problem in the source selection process, the ignorance which surrounds the planning to be reflected in the SSP is a significant factor; this ignorance will be cited again and again throughout this study. The formal training suggested to eliminate problems with the SSP would require an Air Force commitment of additional resources for developing and conducting the training course, but is desirable to achieve improvements in the performance of source selection participants.

Evaluation criteria development. (Major - 3;
Moderate - 3)

Responses. All respondents cited similar problems with evaluation criteria development. The cited problems included criteria that were:

- 1) inaccurate;
- 2) not limited to items which were important to the evaluation;
- 3) appeared to favor a particular approach or contractor;
- 4) too specific;
- 5) inappropriate;
- 6) not well thought-out;
- 7) not well written;
- 8) required numerous re-writes; and,
- 9) did not reflect the proper priorities of the technical evaluation or correlate with the evaluation standards and instructions to offerors.

The most frequently cited cause for these problems was a general lack of understanding on the part of program managers and engineers of the source selection process and how evaluation criteria fit into that process (and relate to other documents such as the evaluation standards and instructions to offerors). Another cause cited by several respondents was personnel turnover; the lack of team continuity from year to year results in the loss of learning and need to train new participants for every source selection. An element of this cause was the emphasis placed on source selection experience in the promotion process; several respondents felt that this emphasis encouraged personnel to participate in one source selection as a square-filling exercise, which prevents the development of expertise in the process. The problems were resolved through numerous reviews and corrections of the criteria and through team meetings to thrash out the problems. Suggested solutions centered on education. Three of the six respondents suggested that ASD/PMPS, the Source Selection Division, develop a short course on source selection to be conducted very early in the planning stages. The course should focus on planning for source selections and provide instruction in preparation of the required documents

and how they relate to each other. One respondent suggested that completion of the Statement of Work and specification be required before development of evaluation criteria could begin. Another suggestion proposed that the evaluation criteria be approved at the ASP to require early development and multi-disciplinary review of the criteria.

Analysis. Half of the respondents cited significant problems with evaluation criteria development. These problems flow throughout the process because many other documents or activities build on or relate to the criteria. Elimination of the problems with this activity could provide a significant benefit to the entire process.

The problems cited for evaluation criteria development re-inforce the need for formal training to provide an understanding of the source selection process. If the participants do not understand the process, it is unlikely that they will see the relationships between the various documents and activities. An understanding of the process should eliminate the failure to tie the evaluation criteria to the requirements documents of the RFP, the evaluation

standards, and the instructions to offerors. The participants would be better able to write objective, relevant, and meaningful criteria.

The issue of personnel turnover and resultant lack of source selection expertise were not addressed by the respondents in their long-term solutions for dealing with problems in developing evaluation criteria. This situation will be addressed in the analysis of technical evaluation problems and in the fourth section of this chapter, which presents the general comments of the respondents.

Evaluation standards. (Major - 3;
Moderate - 1)

Responses. Problems cited for evaluation standards were very similar to those cited for evaluation criteria. The cited problems included standards that were:

- 1) unfair;
- 2) not definitive;
- 3) not specific;
- 4) inaccurate;
- 5) did not reflect the RFP requirements;
and,
- 6) did not correlate with the evaluation
criteria and instructions to offeror.

Cited causes for these problems included:

- 1) a lack of understanding of the source
selection process;
- 2) lack of familiarity with the technical
requirements of the RFP;

- 3) ignorance of the relationship between various parts of the RFP (that standards flow from technical requirements and evaluation criteria);
- 4) preparation of related RFP documents by different personnel and as separate entities;
- 5) lack of training; and,
- 6) time constraints.

Two respondents stated that the problems were resolved through team meetings to refine the standards. One respondent was unable to influence the situation. In the final instance, the problems with the standards were not discovered until the technical evaluation was in process and the bad standards made the evaluation impossible. The RFP and evaluation standards had to be modified, and the technical evaluation re-accomplished. Long-term solutions centered around formal training to educate team members about the purpose and development of evaluation standards. Another suggestion concerned ensuring that team members responsible for preparing the standards are knowledgeable of the technical requirements in the RFP. It was also recommended that the Statement of Work and specifications be completed before development of the evaluation standards.

Analysis. One-third of the respondents had experienced significant problems related to evaluation standards. Again, many of the problems resulted from a lack of understanding of the source selection process

and the relationships between the various documents and activities. These problems could be mitigated through formal education.

An additional problem concerned the lack of familiarity of technical team members with the technical requirements of the RFP, resulting in the development of standards which did not reflect the RFP requirements. This problem would seem to indicate a lack of diligence on the part of the technical team chief, program manager, and/or SSEB chairman. These individuals should, as part of their reviews of the source selection documents, ensure the accuracy of all standards by checking the sources of those standards in the technical requirements documents. This problem could have been influenced by time constraints, which were cited by respondents; quality may have been sacrificed to schedule.

Instructions to offerors (ITO). (Major - 2;
Moderate - 2)

Responses. Both respondents who cited major problems with the ITO focused on the scope of information required by the ITO. In both cases, the instructions required the offerors to submit significant amounts of data which would not or could not be evaluated. In one case, the ITO was 100 pages

in length, single-spaced, which is the same number of pages the offeror was allowed for the technical proposal. An additional problem related to the failure of the ITO to coincide with the evaluation criteria and standards. Those who cited moderate problems with the ITO found that extensive changes were required to the instructions; in one case, the drafters attempted to mandate contractual requirements through the ITO.

Causes cited by the respondents included:

- 1) a lack of understanding of the source selection process;
- 2) lack of knowledge of the "canned" ITO, which led to inclusion of unnecessary data and deletion of needed information;
- 3) lack of integrated review of the ITO;
- 4) lack of knowledge concerning what information is needed to demonstrate compliance with standards;
- 5) lack of training; and,
- 6) time constraints.

Team review of the ITO and a meeting between the SSEB deputy chairman and the area chiefs were used to deal with these problems. Suggestions for long-term solutions included early meetings between functionals and area chiefs to foster a true understanding of the contents and purpose of the ITO, and formal training. One individual suggested the formation of small interdisciplinary teams to prepare the ITO as an integrated document, rather than piece-mealing modified boilerplate ITO segments together.

Analysis. One-third of the respondents also had significant problems with the ITO. These problems were often related to the problems experienced with evaluation criteria and standards, and had the common cause of lack of understanding of the source selection process. The problems with the ITO involve all functional disciplines of the source selection team; the ITO consolidates the data needs of every functional area. In addition to formal education, preparation of an integrated ITO by a small inter-disciplinary team drawn from the SSEB or SSET would appear to be a viable approach to minimizing the problems encountered.

Purchase Request (PR) package development.

(Major - 4; Moderate - 2; Minor - 2)

Responses. Three of the four respondents who characterized PR package development as a major problem stated that the requirements packages delivered by the program office to contracting were deficient. The packages were missing documents or were disjointed, with no flow between related parts such as the Statement of Work, evaluation criteria, instructions to offerors, and basis for award. The packages required major corrections before they were suitable for use by the contracting offices. Causes cited included:

- 1) lack of knowledge of the required contents of a PR package;
- 2) lack of a definitive operating instruction covering PR package contents and preparation;
- 3) failure to involve contracting personnel early in the acquisition cycle; and,
- 4) lack of understanding of the source selection process.

These problems were corrected by returning the package to the originating office with extensive comments on content and format, modifying the contract after award to correct errors and provide missing information, and holding team meetings and reviews to resolve the issues. Suggestions to avoid the problem in the future included earlier involvement by contracting personnel in acquisition planning and the requirements development process, development of a detailed operating instruction on PR package requirements, and education on the source selection process.

The fourth problem characterized as major involved a PR package which did not accurately reflect the desired program, resulting in the receipt of proposals which exceeded the program budget. The PR package had included excessive requirements, such as full cost reporting on a firm fixed price contract, and included requirements which were not properly tailored for the program. The problem was solved by de-scoping the effort to delete excessive or inappropriate

requirements and re-soliciting. The suggested long-term solution was to ensure that requirements are appropriately tailored to the program; no means of ensuring such tailoring was suggested.

Both subjects who cited moderate problems with PR package development had experienced problems with the requirements definition process. Requirements for the program were not defined well early in the process and continued to change throughout the source selection. One of these respondents stated that translating the general requirements of the Statement of Need into the detailed requirements of a Statement of Work and specifications was very difficult and frequently led to conflicts between the engineers and users. The cited causes were:

- 1) a lack of understanding of mission requirements on the part of those responsible for writing the detailed requirements documents;
- 2) that users frequently have a particular equipment item or system in mind, while the engineers in the program office have no "vested interest" in any system; and,
- 3) conflict between the users and the acquisition community due to users' lack of knowledge of acquisition procedures and regulations.

The problems were handled by making changes to the Statement of Work and specifications throughout the source selection and after contract award, and through persistence by engineering and contracting personnel to overcome the users' pre-existing product interests. Long-term solutions were to define the requirements early in the process, to ensure greater familiarity with mission requirements, and to mitigate the effects of politics in the system, which can cause personnel to push the 'party line' rather than being realistic about what can be achieved technically.

Both minor problems concerned incomplete PR packages and the failure of the program office to provide the packages to the contracting office in a timely manner. Lack of knowledge and a definitive standard for PR packages were cited as the cause. Discussions with the drafters of the packages were held to resolve the problems. The suggested long-term solution, in both cases, was the development of internal operating instructions defining the contents of a PR package.

Analysis. Development of the PR package represents an area where significant improvement could be made in the source selection process; eight of the twelve respondents identified problems with this

activity. Because PR packages and their problems are not unique to source selections, improvements in this area could benefit all types of acquisitions.

In addition to the previously cited need for formal education on the source selection process, the respondents also cited the need for a standard defining required PR package contents. The researcher is aware that some contracting directorates at ASD have developed operating instructions which address PR package contents; other directorates could easily develop such standards to alleviate this problem.

An additional factor is the lack of quality control for PR packages. If adequate technical reviews of the completed packages were accomplished before the PR packages left the program office, the number of inadequate packages should be reduced.

The problem with requirements definition cited by two respondents is not so easily dealt with. This problem has been cited by critics of the defense acquisition system (8:145-147; 9:107-117). If politics could be removed from the requirements definition process, this problem would be alleviated; however, reforms to the methods of requirements definition are beyond the scope of this study.

Request for Proposal (RFP) preparation and review. (Major - 2; Moderate - 3; Minor - 1)

Responses. Both major problems were related to the RFP review process. One respondent cited the late receipt of review comments from AFSC, which necessitated an extension to the proposal due date to accomodate the comments. This problem was caused by a 'business as usual' review of the RFP by AFSC. The problem was handled by extending the due date for proposals to answer or implement the AFSC comments. The suggested solution was the establishment of a time limit for AFSC review of RFPs.

The second major problem involved the number of reviews required. For a high dollar program, the following reviews are required:

- 1) Acquisition Review Team (ART) - require approximately one month including preparation, briefing, reviews, response to comments, and resolution of problems;
- 2) Legal review by JAG - requires three to five days, minimum;
- 3) Contracting directorate review - requires three to five days minimum;
- 4) Contract review committee-- requires five days minimum; and,
- 5) AFSC contract review committee - review is accomplished after release of RFP and may be waived if AFSC workload is heavy. The lack of a review on the RFP can cause problems at contract award after a signed contract has been received from the contractor.

These multiple reviews can result in conflicting opinions which must be resolved by the contracting office, often resulting in constant changes to all parts of the RFP. The cited cause of this problem was related to the recent streamlining initiatives, which have shortened the time available for activities between release of the RFP and source selection decision, but added to the time required for up-front, unmonitored activities by adding requirements like the ART. In addition, mandates by the SSA to award without discussions caused reviewers to be over-cautious, lengthening the time required for the reviews. Under extremely unusual circumstances, certain reviews may be waived; generally, however, the only choice for dealing with this problem was to accomplish all the required reviews and resolve all the review comments. The suggested solution for this problem called for allowing the ART to serve as the sole RFP review at ASD. All participants in the current ASD review process participate in the ART; therefore, when the ART is complete, all parties could sign off on the RFP at that time to complete the ASD review cycle in one step.

All the moderate problems cited concerned the time required to accomplish the preparation and review

process. The causes included buyer workload, constantly changing regulatory requirements, excessive number of reviews, and excessive time required to have RFPs reproduced. These causes are hard to influence; therefore, the respondents had dealt rather unsuccessfully with these problems in the past. As long-term solutions, the respondents suggested sharing workload among groups, requesting priority reviews and priority printing, overtime, and cutting the number of reviews required.

The minor problem concerned the lengthening of the RFP preparation cycle by the streamlining initiatives; these initiatives move time from the portion of the schedule which is tracked to the preparation period, require additional document reviews and approvals, and add new higher level coordination/approval/briefings. The respondent was unable to identify an associated cause. The problem has been mitigated through overtime, dedication of personnel to source selections, and letting other workload slip. Suggested long-term solutions included:

- 1) cutting the number and levels of review,
- 2) delegation of approvals to the lowest appropriate level;
- 3) better cooperation between team members and users; and,
- 4) establishment of generic samples of various source selection documents to serve as models.

Analysis. Half of the respondents identified problems with RFP preparation and review; all problems related to the time required to complete the activity. Five of the six respondents characterized the number of required reviews as excessive. The suggestion that the ART serve as the sole RFP review at ASD appears to be a practical means of avoiding redundant reviews and saving time. Implementation of this change would require revision of the ASD FAR Supplement.

One very interesting point arose during the discussions of RFP preparation and review problems. Several respondents cited the recent streamlining initiatives as the cause of increasing RFP preparation leadtimes. The respondents cited additional requirements imposed by the initiatives which are designed to minimize the time consumed by source selections. This topic will be addressed in greater detail in the section of this chapter which deals with the general comments.

Receipt of proposals. (Minor - 1). One minor problem was identified related to receipt of proposals. This was an administrative problem related to security issues specific to the office in which the respondent was assigned; the problem is unrelated to the source selection process.

Quick Look briefing or memo. (Minor - 1)

Responses. The respondent stated that having to stop the entire process to prepare this memo was a minor problem. The cause lay in the perceived lack of value of the memo, which relays very little information to the SSA. Although the respondent has routinely processed the required memo in the past, he suggested that the requirement for the memo be deleted.

Analysis. This activity represents only a minor problem in the process. However, because the Quick Look memo does provide very little benefit to the process, consideration should be given to changing the requirement to allow a notification to the SSA of the proposals received, rather than requiring a briefing or memo.

Technical evaluation. (Major - 9; Moderate - 4; Moderate to Minor - 2; Minor - 4)

Responses. One major problem experienced with the technical evaluation was the lack of specific information and support in the technical evaluation report, caused by lack of training. The problem was resolved by holding discussions with the area chiefs until adequate rationale was obtained for the positions

stated in the evaluation report. The respondent suggested formal training and an update of the ASD/PMPS source selection handbook as long-term solutions.

The remaining major problems dealt with two different aspects of technical evaluation:

1.) Clarification Requests (CRs), Deficiency Reports (DRs), and Modification Requests (MRs), and 2) effects of streamlining initiatives. Two respondents cited the large number of CRs and DRs that were required, which delayed completion of the evaluation. In one case, the problem was caused by deficiencies in the RFP; the second was caused by the failure of the offerors to comply with RFP requirements. Because the information was needed to complete the evaluations, the CRs and DRs were processed. Solutions included more thorough reviews of the technical requirements documents in the RFP and better communication with potential offerors to ensure that RFP requirements are understood and addressed.

Another problem concerned the discovery during the technical evaluation that an important program requirement had been omitted from the RFP, requiring the issuance of an MR to incorporate it, and delaying the contract award by two weeks. The suggested solution included a thorough technical review of the RFP and better planning.

In another case, numerous 're-hashes' of the CRs and DRs were required to reduce the number, which made the process very time consuming. The cited cause was a goal, established by the ASD Commander, of zero CRs and DRs. The respondent felt that this goal caused a loss of support from the evaluators who felt that their comments were being ignored and that management was attempting to control the issues to be addressed through controlling the CR/DR process. The problem was handled by deferring issues to the discussion period, rather than resolving them during the evaluation. The proposed long-term solution included education and a change in the climate to allow proper handling of issues which must be resolved before contract award.

The major problems related to the streamlining initiatives fell into two categories. The first had to do with constraints placed on the evaluation because of streamlining. One respondent stated that the

accelerated schedules do not allow adequate time to conduct a thorough review of the proposals. The page limits on proposals were also cited as a factor limiting the adequacy of the evaluations. Although the subjects complied with the constraints mandated by the streamlining initiatives, they believed that these constraints severely limited the usefulness of the resulting evaluations. They suggested that sufficient time and information be allowed to ensure a meaningful evaluation. One respondent suggested that, if adequate time and data cannot be provided, the requirement for technical evaluation should be deleted because it provides no meaningful measure.

The final major problem was caused by a mandate by the SSA, prior to the start of the source selection, that award would be made without discussions. This mandate meant that the SSA would not approve issuance of any CRs or DRs, which took the evaluation out of the hands of the evaluators. The evaluators were forced to defend (unsuccessfully) their need for information, had valid concerns which could not be addressed, and were unable to obtain clarifications which were needed for an unrestricted evaluation. The respondent felt that the mandate for award without discussions severely limited the validity and completeness of the

evaluation. The SSA's mandate was complied with, and the contract was awarded without discussions. The respondent proposed as a long-term solution that the CR/DR process be taken from the hands of the SSA and returned to the evaluation team chairperson to ensure that complete evaluations are performed and that the government can obtain the benefits that can be derived from meaningful discussions.

The moderate and moderate to minor problems involved:

- 1) the desire of evaluators to send CRs for 'nice to have' information which was not required and could not be evaluated;
- 2) the need for significant revisions to CRs, DRs, close-out sheets, and evaluation reports submitted by the evaluators;
- 3) the requirement for SSA approval of CRs and DRs;
- 4) untimely receipt of technical evaluation reports; and,
- 5) excess time spent in training during the evaluation.

The causes cited for these problems were:

- 1) lack of experience and education;
- 2) lack of technical skill;
- 3) lack of awareness on the part of the evaluators concerning contracting requirements and how contract awards are justified; and,
- 4) lack of training.

The situations were handled through close teamwork and meetings. The respondents cited the need for formal

training. It was also suggested that approval of CRs and DRs be delegated to a lower level than the SSA. One respondent proposed that experienced source selection teams be formed in each Deputy; these teams would be supplemented by technical experts to conduct all the source selections for that organization.

One minor problem involved the need to issue an MR to correct errors in the technical requirements which were discovered during the evaluation, thus adding to the length of the source selection. The MR was needed because the technical requirements documents were prepared too quickly and were not adequately reviewed by technical personnel. The MR corrected the errors, but a formal review of the Statement of Work, specifications, and data requirements would have ensured that the documents were correct as submitted to the contracting office.

Another minor problem concerned the Performance Risk Analysis (PRA). The respondent stated that the PRA was too general and lacking in detail; the grades given for past performance were too high; and that too much emphasis was placed on past performance in the evaluation, to the point that past performance became the most important issue in contractor selection. The problems with the PRA were resolved through discussions

between the contracting officer and evaluators. The proposed long-term solution included clarification of the PRA content requirements and reduced emphasis on past performance.

An additional minor problem was that the evaluators did not know the difference between a CR and a DR, resulting in increased time required for review and revision of the CR/DR submittals. The stated cause was lack of understanding, and the suggested solution was training.

Analysis. Technical evaluation and its sub-activities received 19 problem ratings. The extent of the problems experienced with technical evaluations indicates that this activity provides the greatest opportunity for improvement in the process.

The majority of the problems described resulted from the lack of education or experience of evaluation team members. The technical teams were unable to produce acceptable documentation in a timely manner. Providing adequate training prior to the evaluation period would improve the quality of the evaluation documents and reduce the time needed to review and

revise the documentation. A good understanding of the process would also reduce the amount of non-relevant data required from offerors, providing a reduction in time and possible minor cost savings.

The suggestion that lack of experience be overcome by establishing expert source selection teams in each Deputy sounds attractive, but does not seem very practical due to the limited number of source selections conducted in most organizations. A variation of this idea will be addressed in the section of this chapter which presents the general comments made during the interviews.

The second most frequently identified cause of problems was the streamlining initiatives, which limit the scope of the evaluations. Because technical excellence is often the most important element in determining the successful offeror, any limitation on the validity and completeness of the technical evaluations seems undesirable; thorough evaluations are necessary to provide the highest probability that the resultant contract will provide a system that meets the users' needs. A reduction in the time required to conduct source selections may not be a satisfactory pay-off if the price for that reduction is a compromise in the quality of the end item. The researcher would

take greatest exception to the apparent elimination of DRs, which appears to be a violation of the FAR requirement to disclose and allow correction of deficiencies prior to contract award. Even if deficiencies were corrected through modifications after award to protect the quality of the equipment, it would appear that the contractor would stand to gain financially through equitable adjustments for changes which should have included in the scope and cost of the basic contract. It would seem to be in the government's best interests to reverse the trend toward eliminating correction of proposal deficiencies for the sole purpose of avoiding discussions and BAFOs.

Several of the technical evaluation problems resulted from inadequacies in the technical requirements documents in the RFPs. This problem is a result of the inadequate quality control for PR packages, which was previously discussed.

Mid-Term Briefing. (Moderate - 2; Minor - 1)

Responses. Both moderate problems concerned the inordinate amount of time required to prepare for the briefing, including chart preparation and dry runs. In one case, the effort expended was wasted, in that the briefing was conducted unsuccessfully and had to be completely revised and re-accomplished. This

respondent believed that the failure of the briefing was caused by the lack of knowledge of content and format requirements and lack of understanding of the purpose of the briefing; the suggested long-term solution was education. The second respondent simply felt that the effort required to produce the briefing was far in excess of the benefit derived from the briefing, and suggested that the requirement for a Mid-Term briefing be deleted.

The minor problem concerned the information to be presented at the Mid-Term. The Mid-Term presents the evaluation of the "as received" proposals; no information on the resolution of DRs is presented. The respondent had problems with evaluator, wishing to present information on issues which had been resolved. This was caused by the natural reluctance of people to present out-of-date information. The problem was dealt with through numerous reminders and references to regulatory guidance which defines the information to be included in the Mid-Term. The proposed long-term solution was to allow the information to be presented as part of the Mid-Term briefing.

Analysis. Preparation and conduct of the Mid-Term briefing requires a considerable effort from the entire source selection team. It would seem that this effort could be expended in more beneficial activities if the scope of the briefing were changed. The Mid-Term presents great detail about the initial technical evaluation of the "as received" proposals; this information is obsolete after resolution of the CRs/DRs. It would seem reasonable, therefore, to present only an overview of the evaluation results and the status of any significant problems encountered. In many cases, it would seem that a memorandum could be sent to the SSA in lieu of a formal presentation. A brief overview or memorandum would keep the SSA informed of the status of the source selection, but would relieve the administrative burden of a detailed presentation of information which is of temporary value. Changes to the ASD supplements to AFR 70-15 and AFR 70-30 would be required to modify the Mid-Term briefing requirements.

Cost/price analysis/Most Probable Cost (MPC)

estimate. (Major - 3; Moderate - 1)

Responses. The difficulty and time involved in obtaining the needed information from the Administrative Contracting Officer (ACO) and the Defense Contract Audit Agency (DCAA) were cited by two respondents as a major problem involved in cost/price analysis. Often the audits caused significant delays, and frequently DCAA did full audits on the prime contractor and all proposed subcontractors when only limited audits on the prime had been requested. Stated causes for the problem included the absence of priorities at DCAA; the lack of personal involvement by field personnel, leading to a lack of the closest attention to requests for information; and failure of outside agencies to become attuned to the Air Force's accelerated schedules. The immediate solutions to the problem included frequent telephone follow-ups and close monitoring of audit schedules, and elevation of delinquencies to upper management for attempted resolution; in many cases, however, attempts to accelerate audits were unsuccessful. One respondent suggested that DoD implement initiatives to make field personnel more responsive to buying agency requests for information.

Another major problem with cost/price analysis involved the role of program control (cost estimating) personnel in the analysis. The respondent found that program control personnel believed that they were responsible for performing the analysis which results in the determination of 'fair and reasonable' prices. (Per the Federal Acquisition Regulation, this responsibility belongs to the contracting officer, who may be assisted by a price analyst.) This confusion led to a duplication of effort, in that program control personnel obtained information and performed an analysis which was never used, because the official price analysis was performed by the contracting officer and price analyst. The cause of this problem was a lack of understanding by program control personnel of the functions of the contracting officer vs. program control. The resolution of the problem was very difficult because program control was not willing to limit their activity to what was desired by the contracting officer, which led to a significant waste of resources. The long-term solution was to clarify to program control personnel the responsibilities of the contracting officer.

Two respondents also found major problem with the Most Probable Cost (MPC) estimate. One respondent stated that excessive data was required to be submitted for performance of the MPC. It was also felt that the computer models used by program control to perform the MPC were frequently inappropriate, resulting in an invalid MPC. The stated cause was the unfamiliarity of cost estimating personnel with the MPC process, and the reliance on computer models which are not appropriately tailored to individual programs. The problem related to excess data requirements was dealt with by holding meetings between the directorates to negotiate reductions in the data submittal requirements. No satisfactory alternative to using the inappropriate computer model was achieved or suggested.

The second respondent stated that the MPC was a very time-consuming process which resulted in no benefit to the Air Force. This problem derived from the nature of price determination on competitive acquisitions; the best cost/price is determined by competition. The requirement for an MPC at certain dollar values 'assumes that the MPC developer knows more than the competitive system.' Even if the MPC is at variance from the offeror's proposed price, the Air Force can only point out the general areas of

difference, and has no power to make the offeror change the proposed cost to comply with the MPC estimate. The respondent has complied with the requirement for conduct of an MPC, but suggested that the requirement be deleted as unnecessary in a competitive environment.

The moderate problem identified with cost/price analysis also related to the nature of price determination in a competitive environment. The respondent questioned the extent of analysis required when prices are determined through competition vs. negotiation. The respondent felt that too much analysis is done to no avail in the competitive environment of source selections. The respondent stated that such extensive analysis is performed as an aid in explaining the 'fair and reasonable' nature of the final price because the organizational climate has not yet adapted to accepting competition as the determinor of price. The respondent has performed limited analysis in the past, verifying rates and factors through the field and using the technical evaluation to justify hours. The suggested long-term solution was to severely limit analysis and rely more heavily on competition to justify prices as 'fair and reasonable.'

Analysis. One third of the subjects have experienced significant problems with cost/price analysis or the MPC. The most serious of these problems call into question the need for these activities. In a competitive environment, it should be necessary to perform only enough analysis to assure the government that the offeror has submitted a complete cost proposal which realistically reflects the total requirement of the solicitation. Extensive cost analyses or MPC estimates are of very limited value when prices are determined through BAFUs rather than negotiation. Limiting the cost analysis performed for source selections is possible under recent interpretations of 'adequate price competition' but is not widely accepted, perhaps because the policy is new and not well defined. Elimination of the MPC requirement could be accomplished through revision of AFR 70-15. Increased use of limited cost analysis and elimination of the MPC would alleviate the other problems cited by the respondents for this activity.

Model contract preparation. (Major - 3;
Moderate to major - 1; Moderate - 1; Minor - 1)

Responses. One respondent identified a major problem in contract preparation which was related to the use of MIL-PRIME specifications. With MIL-PRIME,

each offeror has a different Statement of Work (SOW) based on each individual approach to the program. The problem arose from SOW changes resulting from a Modification Request. Rather than writing the changes themselves, the government engineers had the offerors submit revised SOWs. The engineers did not review the SOW changes, and the contracting office later discovered that the changes had not been made as desired. The engineers had tried to save time, without considering the possible consequences; this situation resulted from lack of experience and guidance. The contract negotiator explained the problems to the team members, and worked with the team to resolve them, resulting in time which should have been spent on contracting activities being expended in accomplishing the tasks of other functional team members. The suggested long-term solution included placing more emphasis on the assignment of team members to ensure that any lack of experience is offset by experienced participants, providing close guidance for inexperienced members, and re-examining the use of MIL-PRIME in source selections.

The second major problem was the fact that the physical preparation of the model contracts was very time-consuming and labor intensive. In this instance,

the lack of experienced clerical personnel required the contract negotiators to perform a major portion of the clerical effort. The documents were typed by the contract negotiator, who was required to work a great deal of overtime to complete this clerical task. The suggested long-term solution was to ensure that adequate, experienced, dedicated clerical support is available for source selections.

The final major problem involved the accidental deletion of an evolving model contract from the contract writing data base. While this was a significant problem for the contracting team in this case, it was caused by human error unrelated to the source selection process.

The remaining problems in model contract preparation all involved the continuous flow of contract changes required, either due to CRs and DRs or to changes in the FAR and its supplements, and the difficulty of accommodating them, with quality, under accelerated contracting schedules. In one case, the contract was being awarded under a mandate of "no discussions," which precluded the incorporation of FAR changes. The other cases involved late receipt of CR/DR changes. In all three cases, the solutions involved modification of the contracts after award.

The suggested long-term solutions included providing more contracting manpower; establishing deadlines for receipt of technical changes in the contracting office; allowing for the provision of a notice to the contractor that FAR changes will be included in the resultant contract, without such notice being considered to be discussions; and clarification by upper management as to priorities - 'what is more important, quality or schedule?'

Analysis. Half the sample identified problems with model contract preparation. The most significant factor affecting this activity is the labor-intensive nature of the contract preparation process and the shortage of clerical personnel. The frequent FAR and FAR supplement changes exacerbate the situation. When the CR/DR/MR change process is not adequately controlled, contract preparation becomes very burdensome. This is particularly true when time pressures are present. Contract preparation requires the cooperation of all team members to minimize changes and ensure the accuracy of contract documents.

The request for management clarification of the priorities to be placed on quality and schedule indicates that the streamlining initiatives have also influenced the contract preparation process. It appears that quality is no longer the major concern.

Discussions. (Moderate to major - 1)

Responses. In this instance, the contracting officer was constrained by management in the subjects to be addressed during discussions. In addition to attempting to limit the scope of the discussions, management also required the contracting officer to limit written information provided to the offerors in preparation for the discussions to the general areas for discussion, rather than providing the specific questions to be addressed. The respondent was unable to cite a specific cause for this situation, but felt that it was in some way related to the Commander's goal of zero CRs and DRs. The immediate solution required the contracting officer to hold extensive telephone discussions with the offerors in advance of the discussions, to ensure that all parties were prepared. The management direction to limit the scope of discussions was ignored, because the team felt that

certain issues had to be addressed. The suggested solution was to remove the outside influences on the contracting officer, so that the contracting officer can determine the nature of the discussions.

Analysis. This problem appears to be an outgrowth of the streamlining initiatives; limiting the discussions would accelerate the schedule. However, this acceleration could come at the expense of quality and cost, similar to the situation discussed under 'technical evaluation' above.

BAFO process. (Major - 1; Moderate - 1; Minor - 2)

Responses. The major problem involved the respondent's perception that use of BAFOs is out of favor, and that award without discussions may be mandated by the SSA prior to the start of the source selection. The respondent stated that being required to award without discussions arbitrarily takes the decision concerning the need for a BAFO out of the contracting officer's hands and 'perverts' the source selection process. The cited cause for this problem was the current emphasis on schedule over fairness and logic, which the respondent assumed to be a local interpretation of the AFSC Commander's concerns on source selection streamlining. The respondent stated

that past efforts to deal with this problem had been unsuccessful. Attempts had been made to communicate through the SSAC that a pre-determination to award without discussions and BAFO was not an optimal situation; these attempts were not accepted. The proposed long-term solution was abolition of the existing policy of mandated award without BAFO. The respondent stated that the circumstances of each individual acquisition must be examined before an appropriate determination concerning discussions and BAFO can be made. It was suggested that ASD/PM should make every attempt to get this policy changed.

The moderate problem related to cases in which the SSA has not mandated that award will be made without discussions. In these cases, it was virtually impossible to award without a BAFO because of the narrowness of the criteria that must be met. The criteria for award without BAFO, as stated by the respondent, are:

- 1) full and open competition;
- 2) the possibility of an award without discussions must be stated in the RFP;
- 3) the proposal must meet all the specific requirements of the RFP;
- 4) no discussions were required or conducted; and,
- 5) the contracting officer must certify that the best price available was obtained by the government, based only on prior cost experience or comparison to an established price.

The respondent stated that the criteria, particularly the first and fifth criteria, generally force the use of a BAFO in situations where award without discussions is felt to be appropriate. For example, when competition is conducted after the exclusion of sources (e.g. classified projects which require special access security clearances) an award cannot be made without discussions because of the first criteria. The fifth criteria does not allow the contracting officer to certify that the best price was obtained through competition; a price history or catalog price must be available to allow award without discussions. In the past in situations where award without discussions and BAFO was felt to be appropriate, a BAFO was conducted because the criteria related to price could not be met. The respondent suggested that the criteria be revised in order to expand the possibilities for award without discussions and BAFO.

The minor problems concern the constraints imposed on the time available for preparation of the offerors' BAFOs; the short suspenses can cause the offerors to make serious errors which cannot be corrected. The short-term solutions involved working closely with the offerors' local offices and using telefax machines to

minimize communications time. The proposed long-term solutions involved allowing reasonable times for responses and stressing the need for full compliance with RFP requirements in BAFOs.

Analysis. The minor problems with the BAFO process do not represent serious flaws in the process. By this stage, if the process has been conducted reasonably, the offerors have had adequate time and information to respond to a short suspense request for BAFO.

The mandate to award without BAFOs is, again, a very troubling outgrowth of the streamlining initiatives. Implicit in the mandate is the willingness to accept proposals which do not meet all the minimum requirements of the RFP. While expedient, this willingness is clearly opposed to regulatory guidance which requires conformance to all aspects of the RFP. The determination to award without discussions and BAFO cannot reasonably be made until after the proposals have been thoroughly evaluated to assess compliance with the RFP requirements. The criteria for award without BAFO should preclude such situations; the third criterion requires compliance with all RFP requirements.

The respondent's objections to the first and fifth criteria appear to be reasonable. There does not appear to be any valid reason to preclude award without BAFO when using competition after exclusion of sources. Nor does there appear to be a justification for not allowing the determination that the best price has been achieved to be based on competition. One of the basic assumptions of the government acquisition system is that competition results in the best price available; this assumption should apply to source selections as well as sealed bidding.

SSAC Analysis Report. (Major - 1)

Responses. This problem was an unusual situation related to the unauthorized release of sensitive information by a member of the SSAC who did not work at ASD. This problem led the respondent to suggest that all outside participation in source selections be eliminated; only ASD resources should be utilized.

Analysis. The problem reported by this respondent does not appear to be a common problem in source selections. However, the SSAC Analysis Report, as defined by the source selection regulations, is an analysis of the SSEB report, which is a compilation of the technical evaluation reports prepared by the area

chiefs based on the evaluation reports of the individual evaluators. Four levels of technical reports covering the same information seems excessive. It would appear that the SSAC Analysis Report represents an excessive requirement for documentation.

SSA briefing. (Moderate - 2)

Responses. One respondent stated that too many levels of briefings were required, caused by the involvement of different people at each level. In the past, the respondent has complied with the requirement. The suggested long-term solution was to consolidate or eliminate some levels of briefing.

The second problem concerned disagreement between the SSA and the team due to differences in judgment between individuals. In addition to individual differences, the respondent cited political naivety of the team members as a cause of the problem. In this case, the briefing was revised and presented again, to comply with the SSA's judgment. The respondent suggested that this problem might be eliminated through education in the source selection process to provide a better foundation for making judgment calls.

Analysis. The need for numerous dry runs of the SSA briefing is fueled by the visibility attached to this activity; every level of management wants to ensure that the briefing is conducted successfully. This oversight is intended to provide benefit to the system, but is implemented in a manner which imposes a burden. This activity would seem to provide a good opportunity for streamlining by reducing the number of non-contributing participants.

SSA decision document. (Minor - 2)

Responses. Both minor problems involved the need for repeated re-writes of the document before the technical justification was adequate. Cited causes were lack of communication and lack of knowledge both about the required content and that decision documents are releaseable under the Freedom of Information Act. The problem was solved in both cases through numerous revisions of the document. Suggested long-term solutions called for involving technical personnel in discussions with the SSA concerning the document, and training.

Analysis. While the decision document represents only a minor problem in the process, the causes of this problem are common to many of the serious problems which have been identified in this study. The major influences involved in this problem are the lack of experience with source selections and the failure of teamwork. The decision document requires the input from numerous team members to adequately justify the SSA's decision, but must be circumspect in the information revealed. The solutions suggested by the respondents appear to be reasonable.

Contract Review. (Major - 2; Moderate - 3)

Responses. One major problem involved the need to incorporate numerous late changes while accomplishing the reviews. The problem was caused by lack of a coordinated team effort, late receipt of funds, and untimely receipt of technical changes from the CR/DR process. The immediate solution was to incorporate the changes as they were received, which resulted in a schedule slip. The proposed long-term solution called for better planning to avoid the need for numerous contract revisions.

The second major problem involved a contract which required final review and manual approval at AFSC. The review notice, which was sent by the ASD review

committee, was not received by AFSC. When the document was received at AFSC, it was not on the review schedule. The document was held at AFSC for the next available reviewer, resulting in a delay in contract award. This problem was caused by a failure of communications and lack of a follow-up on the message. When the problem occurred, there was no way to correct the situation. The suggested long-term solution was to follow up on important communications with other organizations.

Two of the moderate problems involved the timeliness of contract reviews. Manpower constraints and reviewer workload caused the inability to accomplish the reviews in a timely manner. Suggested solutions included attempting to schedule source selections to avoid having reviews at the end of the fiscal year or over holidays, and the establishment of a control system for reviews through time standards and measurement.

The final situation involved problems which arose during AFSC review of a contract on which AFSC had waived the RFP review. The problem was caused by the AFSC policy of waiving RFP reviews when their review workload is heavy. The immediate solution included obtaining a "clarification" from the contractor, and

agreeing to include AFSC's required changes in the first modification to the contract. The suggested long-term solution required awareness at AFSC of the critical nature of RFP reviews.

Analysis. Five of the twelve respondents rated contract review as a significant problem. The problems can generally be attributed to lack of teamwork, failure of communications, and manpower constraints. That AFSC, the originator of the streamlining initiatives, would raise obstacles to award due to their failure to review the RFP is a troubling aspect of this problem.

Contract execution. (Major - 1)

Responses. This problem involved a source selection which was set aside for small business. Prior to award of a competitive small business set-aside, the unsuccessful offerors must be notified of the intended awardee. This requirement exists to allow the unsuccessful offerors to challenge the small business status claimed by the apparent successful offeror. In this case, the notification prompted an unsuccessful offeror to submit a protest before award on an issue unrelated to business size. The problem was caused by the requirement for a pre-award notice to the unsuccessful offerors (post award notices are required

in other circumstances). The contract award was delayed while the protest was processed as required by regulations. The respondent suggested that either the requirement for pre-award notice be eliminated, or that notification of all participants in the competition be given earlier in the process. This would allow any challenges to be resolved without affecting the contracting schedule.

Analysis. The experience of the researcher and responses of the interview subjects indicate that this problem is not a common one, due to the small number of small business set-asides awarded through source selections. However, the problem is a significant one when it occurs. The requirement for pre-award notice to unsuccessful offerors seems to be an ill-conceived requirement which should be changed to eliminate the invitation it offers for protests before award. This change would require a modification to the FAR.

Contract distribution. (Minor - 1)

Responses. One respondent cited printing leadtime as a minor problem with this activity, caused by the workload in the printing office. The respondent has dealt with this problem by requesting priority

printing. The suggested solution was to provide greater printing capabilities.

Analysis. This represents a minor problem which should be correctable through increased manpower or additional contracting-out of printing services.

Cost/Benefit of Source Selection Activities

In this portion of the interview, the subjects were asked to review the source selection activities to identify those which require a greater expenditure of effort or resources than the benefit derived. For each activity identified, the respondent was asked to suggest a more cost-beneficial method of completing or achieving the objective of the questioned activity.

The respondents identified 15 activities which they felt could be performed more cost effectively or deleted without detriment to the source selection process. These responses are shown in Appendix C. No activities received unanimous identification as requiring a greater expenditure of effort or resources than the benefit received. Many of the comments made during this portion of the interview echoed comments from the first section.

The significant suggestions which have not been addressed include:

- 1) limiting the number of participants in the ASP by using fewer people with broader backgrounds;
- 2) deleting the requirement for conducting a market survey for identification of sources;
- 3) deleting the requirement for AFSC review of RFPs;
- 4) combining or reducing the number of technical evaluation reports to reduce the time and redundancy involved; and,
- 5) using more oral discussions and fewer CRs and DRs.

With the exception of deleting AFSC review of RFPs, which can cause problems at final contract review, these suggestions appear to be reasonable. Deletion of the market survey would require a change to the FAR; a change to the Competition in Contracting Act might also be required. Changing the technical report requirements would require modifications to AFR 70-15 and AFR 70-30. The other suggestions could be implemented by changing either the ASD Supplement to the source selection regulations or through local policy letters.

Local Initiatives

This section of the interview was intended to determine whether any ASD contracting organizations had implemented unique local initiatives to accelerate source selection schedules. Subjects were asked to identify any unusual means which had been used to avoid problems or accelerate schedules for source selections, describe how effective those actions had been, and state whether those methods would be used again in similar circumstances.

It appears that very few initiatives to accelerate source selection schedules have been instituted by individual contracting directorates at ASD. The initiatives named by the respondents included:

- 1) establishing detailed milestone schedules for each team;
- 2) issuing CRs and DRs in one batch;
- 3) issuing modifications after contract award to avoid the need for discussions;
- 4) obtaining minimal cost data and relying on competition for price justification;
- 5) accomplishing the Mid-Term briefing through a memorandum;
- 6) using several Solicitations for Information and holding individual meetings with potential offerors to discuss requirements definition;

- 7) asking offerors to provide information about rent-free use of government-owned facilities or property and about EEO clearances 15 days after issuance of the RFP, rather than waiting for the information to be submitted with the proposals; and,
- 8) providing written instructions to the technical team on CR/DR preparation and processing.

The respondents felt that these actions were effective, and should be used again.

The third initiative, modifying the contract after award to avoid the need for discussions, is viewed by the researcher as a questionable tactic; the objections to this technique were discussed in an earlier section of this chapter.

The fourth initiative, obtaining minimal cost data and limiting cost/price analysis, cannot really be considered a local initiative; recent DoD policy interpretations have advocated this approach for competitive acquisitions. This technique has not been widely used, however. The respondent's recommendation of the technique demonstrates that it is applicable to major source selections.

The sixth initiative, soliciting information from industry for use in the definition of requirements, is a viable approach to ensuring that requirements are realistic and achievable. Care must be exercised, however, in the conduct of private meetings with potential offerors to ensure that requirements are not tailored to favor a particular approach and that all interested sources receive equal access to the government and are treated fairly.

The seventh initiative, obtaining early notification about rent-free use of government-owned assets and about needed EEO clearances, is an excellent way to ensure that the necessary approvals and clearances are received in a timely manner. Obtaining these approvals and clearances can be very time-consuming; early notification provides an extra cushion to ensure that the award is not delayed by these administrative actions.

The other initiatives might provide some administrative benefit, but do not represent significant improvements or changes to the process. With the exception of the third initiative, these techniques could be employed without any changes to existing regulations or policy documents.

General Comments about Source Selection

The final portion of the interview was intended as an open forum to allow the subjects to make comments on any aspect of source selection. The comments all related to two issues: 1) ion and experience of personnel, cts of the streamlining initiatives of the comments will be divided in . manner. For each issue, the discussion will begin with the comments made by the respondents; an analysis of the comments will follow.

Lack of experience and education of personnel.

Comments. Four comments were made about the lack of experience and education of personnel involved in source selections.

One subject stated that people are very poorly prepared for source selections. The lack of preparation, combined with tight schedules, leads to frustration on both the government and offeror teams, and increases the probability that major mistakes will be made. The respondent suggested that extra guidance be provided for inexperienced program managers, which the respondent felt was the worst place for inexperience on a source selection team.

A second respondent suggested that contracting teams should always pair an experienced person with a trainee. This would ensure a certain amount of experience on every source selection team, rather than continuously cycling inexperienced people through source selections as square-filling exercises for promotions.

The two remaining comments both cited the lack of sustained learning; high turnover causes each source selection to be a learning experience. One of these respondents pointed out that the formal education required for contracting personnel ignores source selection. Both suggested that ASD/PMPS be expanded to include experts to take the lead in writing source selection documents and to serve as the core of source selection teams, to be augmented by program office personnel who would maintain the program continuity after completion of the source selections.

Analysis. The suggestions offered in this portion of the interview to overcome the lack of education and experience are all valuable suggestions.

The most effective solution would establish a pool of experts in a centralized office to run all the source selections at ASD. This would ensure an experienced core to direct each source selection, while

training the inexperienced personnel drawn from the program office to augment the teams and provide program continuity. The fiscal practicality of this suggestion cannot be accurately assessed by the researcher, but it appears to be a more practical solution than establishing dedicated source selection teams in each Deputy or conducting every source selection with an inexperienced team.

Effects of streamlining initiatives.

Comments. Four respondents also made comments which related to the recent streamlining initiatives; all were dissatisfied with the effects which the initiatives have had on the source selection process.

One respondent stated that the current policy stresses schedule above all other considerations. The respondent felt that quality should be the first priority, to ensure that good decisions are made and that sole source engineering changes after contract award are minimized.

A second respondent stated that source selections should be allowed to "run their natural course" rather than being forced into artificial time constraints which ignore the complexity or unusual aspects of some acquisitions.

Another respondent took exception to the mandated use of award without discussions. The respondent stated that, while discussions may have been used too often in the past, a realistic approach would accept that acquisitions of complex systems usually require discussions.

The last comment emphasized the added requirements that have been levied on the system by ASD in the name of streamlining. The Source Selection Management Group (SSMG) is a new bureaucracy which has been created, outside of the tracked time, to review the source selection planning. The Acquisition Review Team (ART) replaced the old "murder board" which reviewed RFPs. While the murder board was a single meeting, the ART is a three phase process, also outside of the tracked portion of the process:

- 1) the ART may be convened before the ASP to participate in development of the acquisition strategy;
- 2) the ART must convene to conduct a detailed review of the draft RFP and all aspects of the acquisition; and,
- 3) after comments are received from industry reviews of the draft RFP, the source selection team's suggested disposition of the comments is reviewed by the ART chairman. The chairman has the discretion to re-convene the ART before issuance of the RFP.

The reviews conducted by the ART have made other established review requirements redundant:

- 1) an engineering review of the technical aspects is required before the ART. This review is repeated during the ART;
- 2) ASD/PMC and AFCLC/JAN conduct compliance and legal reviews as part of the ART. These reviews are repeated after the ART comments are addressed; and,
- 3) the ART reviews the source selection planning, which has already been reviewed by the SSMG.

Additional requirements such as these have added to the total time required to complete a source selection, without affecting the portion of the process which is tracked against the command goal, which represents only a very small part of the process.

Analysis. The comments on the effects of streamlining reflect a great deal of cynicism toward the initiatives. The streamlining initiatives were intended to lessen the time required to conduct source selections. The implementation of these initiatives brought some new requirements, but no existing requirements were removed. The oversight mandated by the initiatives is applied to a very limited segment of the process, ignoring any schedule growths which occur

outside of that segment of the process. The segment which is covered by the time constraint is perhaps the most disciplined and most critical portion of the process, benefiting least from the imposition of time limits.

Additionally, there is presently great emphasis on Total Quality Management (TQM) at ASD, but no mention of the application of TQM to the source selection process. Indeed, the respondents felt that the opposite applies to source selection because the emphasis is on schedule over quality or other considerations.

Chapter Summary

This chapter described the subjects who took part in the interviews for this study, presented the findings obtained from those interviews, and analyzed those findings.

The interviews revealed that participants in recent source selections at ASD perceive problems in the source selection process. The most significant problems identified by the interview subjects were in the following areas:

- 1) preparation of source selection documents such as the evaluation criteria, evaluation standards, and the instructions to offerors;

- 2) preparation of the purchase request package which defines the requirements of the acquisition;
- 3) review of the Request for Proposal; and,
- 4) the technical evaluation.

The cited causes of these problems were:

- 1) lack of understanding of the source selection process;
- 2) lack of experience in source selection;
- 3) lack of training of the participants;
- 4) lack of quality control on technical documents;
- 5) excessive oversight requirements; and,
- 6) effects of streamlining initiatives.

The conclusions and recommendations resulting from the research will be addressed in the following chapter.

Conclusions and Recommendations

Overview

This chapter draws conclusions from the findings presented in Chapter IV to answer the investigative questions posed by this study. After the discussion of the investigative questions, some general conclusions will be presented. These conclusions will be followed by recommendations related to the source selection process, limitations of this study, and recommendations for future research.

Conclusions

The interviews conducted to gather data for this study revealed that contracting personnel involved in recent source selections at Aeronautical Systems Division (ASD) perceive problems in the conduct of source selections. The problems identified by this study do not indicate fundamental flaws in the basic source selection process; the problems indicate the need for educational, procedural, and organizational climate changes, and modification or elimination of individual tasks within the process.

Investigative Question 1: What are the major factors contributing to the length of the process? Can these factors be controlled?

This pilot study has identified several factors which appear to be significant contributors to the length of the source selection process. All of the problems identified by this study can be attributed to one or more of these factors, each of which will be briefly addressed following the list. These factors are:

- 1) lack of understanding, experience, and training;
- 2) lack of teamwork;
- 3) lack of quality control;
- 4) lack of written guidance;
- 5) effects of ASD streamlining initiatives;
- 6) excessive oversight;
- 7) unnecessary or excessive requirements;
- 8) manpower constraints; and,
- 9) politics.

Lack of understanding, experience, and training was the most frequently cited cause for problems experienced by the respondents. The respondents felt that most participants in source selections are ill-prepared, lacking both a general understanding of the process and a knowledge of their individual tasks and

responsibilities. The absence of formal training in source selection requires the participants to learn on the job, often having to repeat tasks several times to accomplish them successfully.

The failure of teams to work together effectively can cause problems in planning the source selection, resolving problems which arise during its conduct, and accomplishing multi-disciplinary tasks efficiently. This lack of teamwork can be attributed to conflicts resulting from the different roles served by the various functionals on the team and the lack of understanding of the value, purpose, and requirements of those roles. These conflicts can be seen between program managers and contracting personnel, between program control and contracting, and between users and the acquisition community.

Many problems encountered by the respondents were caused by inadequate quality control of source selection and technical requirements documents. The most significant problems caused by failure of adequate quality control involved deficiencies in and lack of correlation between the evaluation criteria, evaluation standards, and instructions to offerors; defective PR packages; and inadequate technical evaluation

documentation. The documents required repeated revisions, and in some cases led to the need for modifications to the solicitations and proposals and to re-accomplishment of the technical evaluations.

The lack of written guidance was a significant factor in the problems encountered in PR package preparation, where respondents cited the absence of a standard defining the contents of the package. The respondents also cited the lack of appropriate "sample" documents as a factor in technical evaluation and performance risk analysis documentation problems. The lack of written guidance resulted in incomplete PR packages and inadequate technical evaluation documentation which had to be returned to the originators for significant revisions, adding to the length of the source selection.

Several respondents cited the additional requirements implemented by the ASD streamlining initiatives, such as the Source Selection Management Group and the Acquisition Review Team (ART), as

contributors to the length of the process. The respondents stated that these requirements added significantly to the total time required to complete a source selection by increasing the up-front time which is not monitored against the command goal of 120 days from RFP release to SSA decision.

Excessive management oversight was cited as a significant problem by many of the interview subjects. The excessive oversight was most evident in the Business Strategy Panel (BSP)/Acquisition Strategy Panel (ASP), where the judgment of those most knowledgeable about the program was frequently overturned; the RFP and contract review cycles, where the respondents encountered numerous redundant reviews; the requirement for Source Selection Authority (SSA) approval of the Clarification Requests (CRs) and Deficiency Reports (DRs), which delayed the issuance of CRs and DRs and sometimes limited the resolution of source selection issues; and in the final SSA briefing, which required several levels of briefing because of the numerous individuals involved.

The respondents cited several unnecessary or excessive requirements which add to the length of the process. The excessive requirements included numerous redundant management and RFP reviews, duplication in

the market survey and synopsis requirements, the need to send RFPs to all respondents to the synopsis, extensive cost and price analysis, and the SSAC Analysis Report. Unnecessary requirements included the Quick Look briefing, Most Probable Cost estimate, and Mid-Term briefing.

Manpower constraints were cited as causes for delays in contract preparation and timely completion of RFP and contract reviews. The respondents felt that clerical support to source selections was frequently inadequate, and that the workloads of review personnel caused delays in reviews or waiver of AFSC RFP reviews.

Politics was cited as a problem in the ASP, requirements definition process, and source selection briefings. The respondents felt that politics frequently interfered with the exercise of sound business judgment.

All of these factors can be controlled to some extent. Most of the factors can be influenced locally, with the factors involving training and experience, teamwork, quality control, written guidance, and ASD streamlining initiatives being totally under local control. Some aspects of the factors involving oversight and unnecessary/excessive requirements factors are controlled by AFSC or higher

authorities. The last factor, politics, can be influenced to a limited extent at all levels in the bureaucracy, but cannot be eliminated from the acquisition process.

The changes needed to mitigate the influences of these factors will be addressed later in this chapter.

Investigative Question 2: What local initiatives have been implemented to expedite source selections? How effective have these initiatives been?

This study identified no significant local initiatives. The respondents identified some actions which have been taken to expedite source selections, but all have been very limited in scope and effect.

This lack of local initiatives is troubling in that the participants all were able to cite suggested solutions to the problems which are encountered in source selection, but had taken no action to have these solutions implemented. It is possible that a cause for this lack of initiative by the contracting personnel can be seen in the reaction to attempts which the respondents had made to influence decisions which they felt would be detrimental to their programs. One respondent had attempted to influence ASP guidance; another had attempted to influence an SSA mandate that a source selection would be conducted without

discussions. Both respondents were unsuccessful in their attempts to reverse decisions which they felt were harmful to their programs. These failed attempts may have led to a feeling of powerlessness in the face of the bureaucracy which controls the process.

General. The general areas which must be improved are shown below, ranked by the researcher in descending order of importance:

- 1) skill and knowledge of participants;
- 2) determination of appropriate levels of management oversight;
- 3) elimination of non-value-added activities;
- 4) quality of business decisions; and,
- 5) quality of source selection and technical requirements documents.

These areas for improvement encompass problems influenced by all the factors described above. Improvements in these areas would limit source selection activities to those essential to the integrity of the process, remove extraneous participants from the process, and attempt to ensure that actions are completed correctly the first time, in a manner that serves the best interests of the program and the government. The actions recommended to bring about the needed improvements are discussed below.

Recommendations

The recommendations of this study can be divided into two categories: specific recommendations related to the individual activities of the source selection process and general recommendations related to improvements in performance of the process.

Specific Recommendations for Individual Activities. The specific recommendations for source selection activities were addressed in detail in Chapter IV. These recommendations are also listed in Appendix D for the reader's convenience. A summary of the most significant recommendations, which will be followed by rationale for the suggested changes, is:

- 1) changing public law/FAR requirements to allow screening of CICA synopsis respondents and to charge consultants and marketeers for RFPs as a cost of doing business;
- 2) developing instructions to define PR package requirements;
- 3) establishing the Acquisition Review Team (ART) as the sole RFP review at ASD;
- 4) completing the initial technical evaluation before determining whether to award without discussions;
- 5) severely limiting cost analysis;
- 6) deleting the requirement for Most Probable Cost (MPC) estimates;
- 7) deleting the SSAC Analysis Report;
- 8) reducing the participants in the SSA briefing; and,
- 9) raising manual approval thresholds.

The regulations currently require the government to expend considerable resources to provide RFPs, at no charge, to all respondents to the CICA synopsis. Frequently, many of the respondents are consultants or marketers who are not potential sources for the goods or services being acquired. These non-manufacturing firms then use the information provided at government expense to solicit business from potential offerors. The regulations should be changed to allow the government to charge these firms a reasonable fee for the reproduction of the RFPs.

Because some ASD organizations do not have standards to define PR package requirements, the packages delivered to contracting offices are frequently incomplete or otherwise inadequate. These packages are reviewed and returned to the program offices for correction, resulting in the loss of considerable time. These problems with PR package requirements could be reduced by the development of operating instructions defining the content and format of PR package documents.

The current RFP review cycle for a high dollar program includes the following sequential reviews:

- 1) ART,
- 2) JAG,
- 3) directorate contract review committee,
- 4) ASD contract review committee, and,
- 5) AFSC contract review committee.

Representatives from JAG and the directorate and ASD review committees participate in the ART; each conduct another review after the ART is completed. These redundant reviews could be avoided by having all participants approve the RFP upon completion of the ART.

In at least one interview for this study, it was reported that the SSA had mandated award without discussions at the start of the source selection. The determination to award without discussions should be based on the adequacy of the proposals received; all requirements of the RFP must be satisfied before contract award. A mandated award without discussions places the highest priority on schedule, and could compromise the quality or increase the cost of a system by allowing contract award against a deficient proposal. To ensure that all requirements of the RFP are met, the decision to award without discussions should not be made before completion of the initial technical evaluation.

In a source selection, the contract price is not reached through negotiation; rather, the proposed price of the proposal which is determined to represent the best value is accepted by the government in a competitive environment. Detailed cost analysis is of very little value, because the government cannot enforce any of the findings; only general areas of disagreement can be discussed. Therefore, the considerable effort involved in the routine performance of audits and cost analysis is wasted. When prices are determined through competition, cost analysis should be limited to the minimum required to ensure that the cost proposal includes all requirements of the RFP.

The rationale for deletion of the MPC is also based on the method of determining prices in competitive environments. The MPC is a time-consuming effort which produces no benefit to the Air Force in a competitive acquisition and should, therefore, be eliminated.

The SSAC report is an analysis of the SSEB report, which is a compilation of the technical reports prepared by the area chiefs from the reports prepared by the individual evaluators. Four levels of written reporting of the same information appears to be

excessive. Any information not included in the SSEB report which the SSAC wishes to convey to the SSA could be presented at the final briefing without the need for an additional written report.

The last activity-specific recommendation cited above involves increases in the manual approval thresholds, which would reduce the number of contracts requiring final reviews and manual approval above the contacting directorate level. The ASD review committee and AFSC would still have the opportunity to review the RFPs for these acquisitions, which should be adequate because the RFPs are essentially model contracts.

General Recommendations. The first general recommendation involves training. There is a serious need for development of an extensive training program to ensure that source selection participants thoroughly understand the process and their tasks within that process. Both multi-disciplinary and specialized task- or discipline-oriented learning modules are needed. One possible approach would begin with a lecture and discussion session for all participants, to provide an overview of the process and make clear the relationships between the various activities and participants in the process. This introductory session could be followed by smaller "workshop" sessions which

would include instructional sessions on specific tasks and multi-disciplinary sessions to include activities such as case studies and exercises in planning, strategy formulation, problem-solving, and document preparation and review. In addition to providing practical experience with skills required in source selection, these multi-disciplinary exercises would foster the teamwork which is essential for effective conduct of the process.

The second general recommendation calls for application of Total Quality Management (TQM) to the source selection process. The problems revealed by this study do not appear to be systemic in nature; rather they often resulted from the inclusion of non-value-added activities or procedures, failures of quality control, or implementation of ill-conceived decisions. The process, including AFSC activities and participation, and the ASD streamlining initiatives should be subjected to a complete TQM review to ensure that all decisions and activities provide a benefit to the process.

The third recommendation involves the possibility of establishing a centralized source selection office to provide core teams of experienced personnel to conduct major source selections for the product

division, augmented by personnel from the program offices. The practicality of establishing such an organization should be assessed, because it would appear that maintaining such expertise and applying it to every source selection would provide significant benefit to the process.

Limitations

The validity and applicability of this research is subject to several limitations.

The research was conducted solely at ASD due to constraints on time and resources. Much of the research might be applicable to other AFSC product divisions, but some findings are unique to ASD. It is not known whether any of the research is applicable to other commands of the Air Force or to the other Armed Services.

The research was conducted with a small sample; only 12 individuals were interviewed. However, the population from which the sample was drawn consisted of ASD contracting personnel who had completed major source selections between February 1988 and June 1989;

only 19 individuals made up the entire population. The twelve individuals who comprised the sample were sufficiently experienced and knowledgeable in government contracting and honest and forthcoming during the interviews to be considered a credible sample for a pilot research study.

The research was limited to the perspectives of contracting personnel. While these individuals had valuable insight into the entire source selection process, the views expressed may have been affected by parochial interests.

The information gathered during the research effort was qualitative in nature, not quantitative, and is therefore subject to interpretation. However, because this was a pilot study, the desired information could be elicited only through narrative expressions of the participants' experiences.

Recommendations for Further Research

Replication of this study at other AFSC product divisions, other Air Force commands, and buying commands of other Armed Services is recommended. This replication would determine whether the same problems are experienced throughout government source selections and could result in additional recommendations for improving the process.

Similar studies could also be conducted with personnel from other disciplines, such as program management and engineering. While contracting personnel have an insight into the entire process, the views of source selection participants from other functional areas would provide a broader perspective.

Additional research is recommended into the individual activities identified by this study as significant problems in the source selection process. Suggested activities for this research include preparation of evaluation criteria and standards, instructions to offerors, PR package development, RFP preparation and review, and technical evaluation.

Another worthwhile research effort would be the development of a source selection handbook including an explanation of the process, detailed instructions, and sample documents. Such an effort could study various source selections to develop instructions and identify the best documentation which could then be tailored by source selection teams.

The final recommendation for additional research involves the development of a training course on source selection. The course should include an overview to provide an understanding of the process, instructional sessions on specific tasks, and multi-disciplinary sessions to include activities such as case studies and exercises in planning, strategy formulation, problem-solving, and document preparation and review. In addition to developing a thorough understanding of the source selection process, the objectives of the course should include providing practical experience with skills required in source selection and building the teamwork which is essential for effective conduct of source selections.

Appendix A: Interview Questions

Name: _____ Interview No. _____
Position: _____ Warranted? Y N
Product Division: _____
Program(s): _____
No. years buyer/PCO experience: _____
Other non-buyer/PCO acquisition-related experience: ____

Experience at other product divisions: _____

Extent of source selection experience: _____

PRE-EVALUATION ACTIVITIES

Business Strategy Panel/Acquisition Strategy Panel

Identification of sources

Market survey/synopsis

Source Selection Plan

Preparation

Review and approval

Evaluation criteria development

Cost

Specific

Assessment

General considerations

Evaluation standards

Instructions to Offerors preparation

Request for Proposal issuance

PR package development

RFP preparation

Review

PROPOSAL EVALUATION AND CONTRACT AWARD

Receipt of proposals

Quick Look briefing or memo

Oral briefings by offerors (optional)

Technical evaluation

Deficiency Reports

Clarification Requests

Modification Requests

Technical evaluation reports

Performance Risk Analysis

Mid-Term briefing

Cost/price analysis/Most Probable Cost

Competitive range determination

Model contracts

Preparation

Review

Discussions

Best and Final Offers BAFO)

Request for BAFO

Receipt of BAFO

Technical evaluation update

SSEB Executive Summary Report

SSEB briefing to SSAC

or SSET Proposal Analysis
Report

SSAC Analysis Report

Final SSA briefing

SSA decision document

Contract execution

Contract review

Contract approval

Contract distribution

Are there any pre-evaluation activities on this list with which you have no experience?

What is the first item on the list which you would characterize as a problem in the source selection process?

Do you consider this area to be a minor, moderate, or major problem?

What are the problems that you've experienced with this activity?

What do you think caused the problem(s)?

What actions were taken to solve the problem(s)?

Do you have any suggestions for avoiding the problem(s) in the future?

(This series of questions is repeated for every activity identified as representing a problem in the source selection process).

Do you see any activities listed which require an investment of time and/or energy in excess of the benefit that results?

Could this activity be deleted without detriment to the process, or is there a more cost effective way to accomplish the effort? (Repeated for each activity identified).

Have you ever used any unusual means to solve problems, avoid problems you've experienced on past source selections, or to accelerate a source selection schedule?

How well did this initiative work?

Would you use the same technique again?

Have you thought of any other techniques that you would like to try if you ran into the same situation again?

Do you have any comments about the source selection process or this interview?

Appendix B: Interview Results
Problem Areas

Activity	No Exp	Min	Min- Mod	Mod	Mod- Maj	Maj	Total Prob
BSP/ASP	2	3		1			4
Source ID		4		1			5
SSF		1					1
Prep	2			1		1	2
Review	1						
App'l	2						
Criteria	2			3		3	6
Standards	1					4	4
ITO	1			2		2	4
RFP							
PR pkg		2		2		4	8
RFP prep		1		1			2
Review				3		2	5
Proposals		1					1
Quick Look		1					1
Oral brief.	2						0
Tech eval				2		2	4
DRs		1	1	1		3	6
CRs		1	1	1		2	5
MRs		1				1	2
Reports		1					1
PRA		1					1
Mid-Term		1		2			3
Cost/price/ MPC	1			1		3	4
Competitive range							0
Model k prep		1		1	1	3	6
Discussions					1		1

RFP prep (cont.)		<ul style="list-style-type: none"> - RFP preparation can start before complete PR package is received; develop PR package and RFP in parallel
RFP review	4	<ul style="list-style-type: none"> - too many higher level reviews: ART team, ASD/PMC, and AFSC - Delete AFSC reviews; they are not part of the ART and do not understand the problems; their demands cause MRs; they should either be totally involved in the program or not be involved at all - make the ART the sole RFP review at ASD
Quick Look	2	<ul style="list-style-type: none"> - combine with Mid-Term - delete
Tech eval	4	<ul style="list-style-type: none"> - involves too many people with too little skill - CR/DR approval by SSA wastes time; cannot issue CRs/DRs until after Mid-Term - combine or reduce number of evaluation reports; time-consuming and redundant - delete SSAC Analysis Report
Mid-Term	4	<ul style="list-style-type: none"> - delete (3 responses) - make optional or allow memo
MPC	2	<ul style="list-style-type: none"> - delete (2 responses)
Cost/price analysis	3	<ul style="list-style-type: none"> - audits useless due to method of price determination in source selection; delete - delete - limit cost data required - tune DCAS and DCAA to new accelerated schedules
Model contract preparation	1	<ul style="list-style-type: none"> - ensure adequate contracts team: dedicated CO, two buyers, clerk

Discussions	2	<ul style="list-style-type: none"> - use more oral discussion and fewer CRs and DRs - award without discussions more often when appropriate
BAFOs	2	<ul style="list-style-type: none"> - revise criteria to allow more awards without discussions - use less frequently
SSA briefing	1	<ul style="list-style-type: none"> - when SAF is SSA, briefing is very hard to schedule; allow use of report in lieu of briefing
Contract review and approval	1	<ul style="list-style-type: none"> - raise manual approval thresholds - process takes too long; should be much faster because final contract has been through numerous reviews

Bibliography

1. Cushing, Michael J., Source Selection Officer. Personal interview. ASD, Wright-Patterson AFB OH, 7 Jun 89.
2. Department of the Air Force. Formal Source Selections for Major Acquisitions. AFR 70-15. Washington: HQ USAF, 27 April 1988.
3. -----. Formal Source Selection for Major Acquisitions (Draft). AFSC Supplement 1, AFR 70-15. Andrews AFB: HQ AFSC, November 1988.
4. -----. Source Selection Policy and Procedures (Draft). ASD Supplement 1, AFR 70-15. Wright-Patterson AFB: HQ ASD, May 1988.
5. -----. Streamlined Source Selection Procedures. AFR 70-30. Washington: HQ USAF, 27 April 1988.
6. -----. Streamlined Source Selection Procedures (Draft). AFSC Supplement 1, AFR 70-30. Andrews AFB: HQ AFSC, undated.
7. Department of Defense and others. Federal Acquisition Regulation. Washington: Government Printing Office, 1 April 1984.
8. Gansler, Jacques. Affording Defense. Cambridge MA: The MIT Press, 1989.
9. Kotz, Nick. Wild Blue Yonder: Money, Politics, and the B-1 Bomber. New York: Pantheon Books, 1988.
10. Randolph, Gen Bernard P. "Air Force Acquisition: Toward the Direct Route," Program Manager, 2-8 (September/October 1988).
11. Source Selection Streamlining Action Group. Briefing Charts: "Recommendations for Improvement of Source Selection Process - The Time is Right!" Wright-Patterson AFB: HQ ASD, undated.

Additional Sources - Personal Interviews

1. Brady, John, Branch Chief. Aeronautical Systems Division, Wright-Patterson AFB OH, 21 Jun 89.
2. Fulmer, Dan, Contracting Officer. Aeronautical Systems Division, Wright-Patterson AFB OH, 5 Jul 89.
3. Gicale, Timothy K., Contract Negotiator. Aeronautical Systems Division, Wright-Patterson AFB OH, 27 Jun 89.
4. Jackson, Gwen, Contract Negotiator. Aeronautical Systems Division, Wright-Patterson AFB OH, 28 Jun 89.
5. Nolin, Robert M., Contracting Officer, Aeronautical Systems Division, Wright-Patterson AFB OH, 30 Jun 89.
6. Randall, Kirby, Group Leader. Aeronautical Systems Division, Wright-Patterson AFB OH, 27 Jun 89.
7. Rankin, Thom, Contract Negotiator. Aeronautical Systems Division, Wright-Patterson AFB OH, 30 Jun 89.
8. Roguski, Treva, Contract Negotiator. Aeronautical Systems Division, Wright-Patterson AFB OH, 30 Jun 89.
9. Ross, Kenneth I., Contracting Officer. Aeronautical Systems Division, Wright-Patterson AFB OH, 29 Jun 89.
10. Seeker, Leonard G., Contracting Officer. Aeronautical Systems Division, Wright-Patterson AFB OH, 27 Jun 89.
11. Vasileff, Bill, Contract Negotiator. Aeronautical Systems Division, Wright-Patterson AFB OH, 27 Jun 89.
12. Weber, Deborah E., Contracting Officer. Aeronautical Systems Division, Wright-Patterson AFB OH, 3 Jul 89.

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REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED			1b. RESTRICTIVE MARKINGS		
2a. SECURITY CLASSIFICATION AUTHORITY			3. DISTRIBUTION/AVAILABILITY OF REPORT Approved for public release; distribution unlimited.		
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE			4. PERFORMING ORGANIZATION REPORT NUMBER(S) AFIT/GCM/LSY/89S-10		
6a. NAME OF PERFORMING ORGANIZATION School of Systems and Logistics			6b. OFFICE SYMBOL (If applicable) AFIT/LSY		7a. NAME OF MONITORING ORGANIZATION
6c. ADDRESS (City, State, and ZIP Code)			7b. ADDRESS (City, State, and ZIP Code)		
8a. NAME OF FUNDING/SPONSORING ORGANIZATION		8b. OFFICE SYMBOL (If applicable)		9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER	
8c. ADDRESS (City, State, and ZIP Code)		10. SOURCE OF FUNDING NUMBERS			
		PROGRAM ELEMENT NO.	PROJECT NO.	TASK NO.	WORK UNIT ACCESSION NO.
11. TITLE (Include Security Classification) AN ANALYSIS OF THE SOURCE SELECTION PROCESS AT AERONAUTICAL SYSTEMS DIVISION					
12. PERSONAL AUTHOR(S) Elaine C. Rourke, B.A., GM-13, DAF					
13a. TYPE OF REPORT MS Thesis		13b. TIME COVERED FROM _____ TO _____		14. DATE OF REPORT (Year, Month, Day) 1989 September	
				15. PAGE COUNT 149	
16. SUPPLEMENTARY NOTATION <i>See back</i>					
17. COSATI CODES			18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)		
FIELD	GROUP	SUB-GROUP	Acquisition, Government Procurement, Contracts, Contract Proposals, Theses, (S&W)		
15	05				
15	01				
19. ABSTRACT (Continue on reverse if necessary and identify by block number)					
<p>Thesis Advisor: Carl R. Templin, Maj Assistant Professor of Contracting Management Department of System Acquisition Management</p> <p>Approved for public release: IAW AFR 190-1. <i>Larry W. Emmelhainz</i> LARRY W. EMMELHAINZ, Lt Col, USAF 11 Oct 89 Director of Research and Consultation Air Force Institute of Technology (AU) Wright-Patterson AFB OH 45433-6583</p>					
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT <input type="checkbox"/> DTIC USERS			21. ABSTRACT SECURITY CLASSIFICATION		
22a. NAME OF RESPONSIBLE INDIVIDUAL Carl R. Templin			22b. TELEPHONE (Include Area Code) 513-255-4845		22c. OFFICE SYMBOL AFIT/LSY

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➤ This study was intended to identify factors which affect the length of the source selection process and to suggest changes to make the process more efficient. To accomplish this objective, interviews were conducted with Aeronautical Systems Division (ASD) contracting personnel who had recently participated in source selections.

The study identified several factors which appear to be significant contributors to the length of the process. The most significant factors are lack of understanding, experience, and training; lack of teamwork; effects of ASD streamlining initiatives; excessive oversight; and unnecessary or excessive requirements.

The recommendations of this study are intended to limit source selection activities to those essential to the integrity of the process, remove extraneous participants from the process, and ensure that actions are completed correctly the first time. The most significant recommendations related to specific activities include:

- 1) changing public law/FAR requirements to allow screening of CICA synopsis respondents to charge consultants/marketeers for RFPs;
- 2) establishing the Acquisition Review Team as the sole RFP review at ASD;
- 3) completing the initial technical evaluation before determining whether to award without discussions;
- 4) severely limiting cost analysis; and,
- 5) deleting the requirement for Most Probable Cost estimates.

Keywords

FLD

The general recommendations are:

- 1) development of an extensive training program to develop a thorough understanding of the source selection process, provide practical experience with skills required in source selection, and build teamwork;
- 2) application of Total Quality Management to the source selection process to ensure that all decisions and activities provide a benefit to the process; and,
- 3) investigate establishing a centralized source selection office to provide core teams of experienced personnel to conduct all major source selections in order to maintain expertise and apply it to every source selection.

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